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Alabama Department of Public Health

1982 Annual Report

BEST AVAILABLE COPY

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State of Alabama

DEPARTMENT OF PUBLIC HEALTH

State Office Building
Montgomery, Alabama 36130

IRA L. MYERS, M.D.
STATE HEALTH OFFICER

July 28, 1983

The Honorable George C. Wallace
Governor of Alabama
State Capitol
Montgomery, Alabama 36130

Dear Governor Wallace:

Because of dedicated, conscientious staff at the state and local levels, we have made significant progress in protecting the health of Alabamians. We are living longer. In 1982 a decrease occurred for the usual four leading causes of death, to which about 70 percent of deaths in Alabama are attributed. This is the first time since 1972 that cancer deaths have decreased. Vaccine preventable diseases are virtually controlled if we continue immunizations. We have not had a case of indigenous measles in two years.

However the need for diligence in health care continues. Even after decreases, we recorded about 12,000 deaths from heart diseases and almost 7,000 from cancer in 1982. Preliminary statistics indicate that infant and maternal deaths both increased last year. Illegitimacy and venereal diseases, which are health as well as social problems, continue to increase.

I am pleased to submit this report indicating our achievements and our challenges. I solicit your continued support for public health.

Sincerely yours,

Ira L. Myers

Ira L. Myers, M.D.
State Health Officer

STATE COMMITTEE OF PUBLIC HEALTH COMMITTEE MEMBERS

Carl A. Grote, Jr., M.D.
Chairman
Huntsville

William R. Bridges, M.D.
Vice Chairman
Mobile

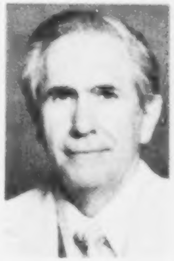
Ira L. Myers, M.D.
Secretary
Montgomery

Jeff H. Beard, M.D.
Mobile

Ernest C. Brock, Jr., M.D.
Tuscaloosa

William D. Lazenby, M.D.
Opelika

William A. Leitner, M.D.
Birmingham



Ira B. Patton, M.D.
Oneonta

W. Earle Riley, M.D.
Fairfield

Aubrey E. Terry, M.D.
Russellville

William C. Waller, M.D.
Montgomery

James E. West, M.D.
Anniston

Kenneth C. Yohn, M.D.
Eufaula

Council on Dental Health
Roy R. Kracke, Jr., D.M.D.
Birmingham

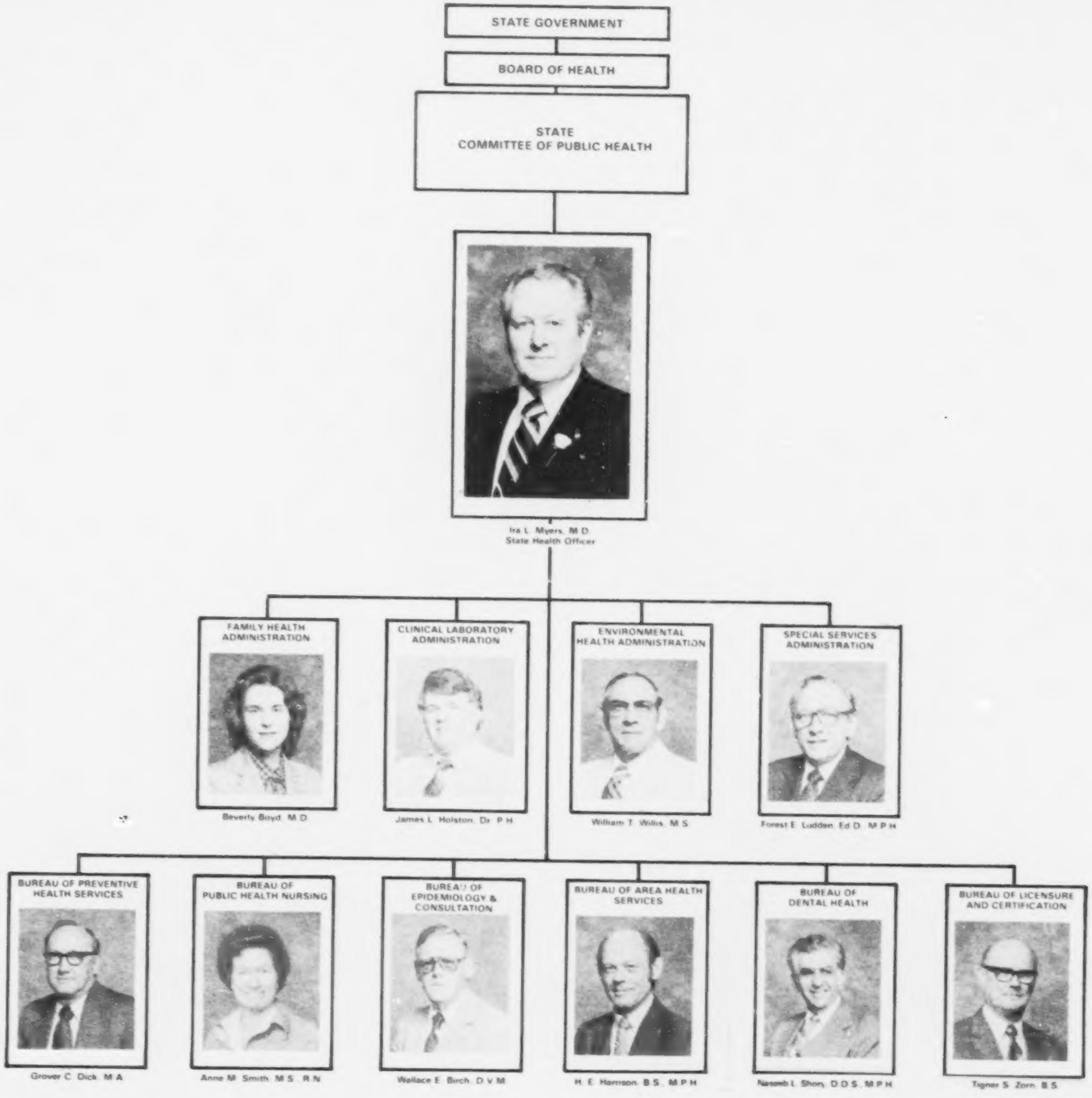
Council on Prevention of
Disease & Medical Care
Margaret Millsap, Ed.D.
Birmingham

Picture
Not
Available

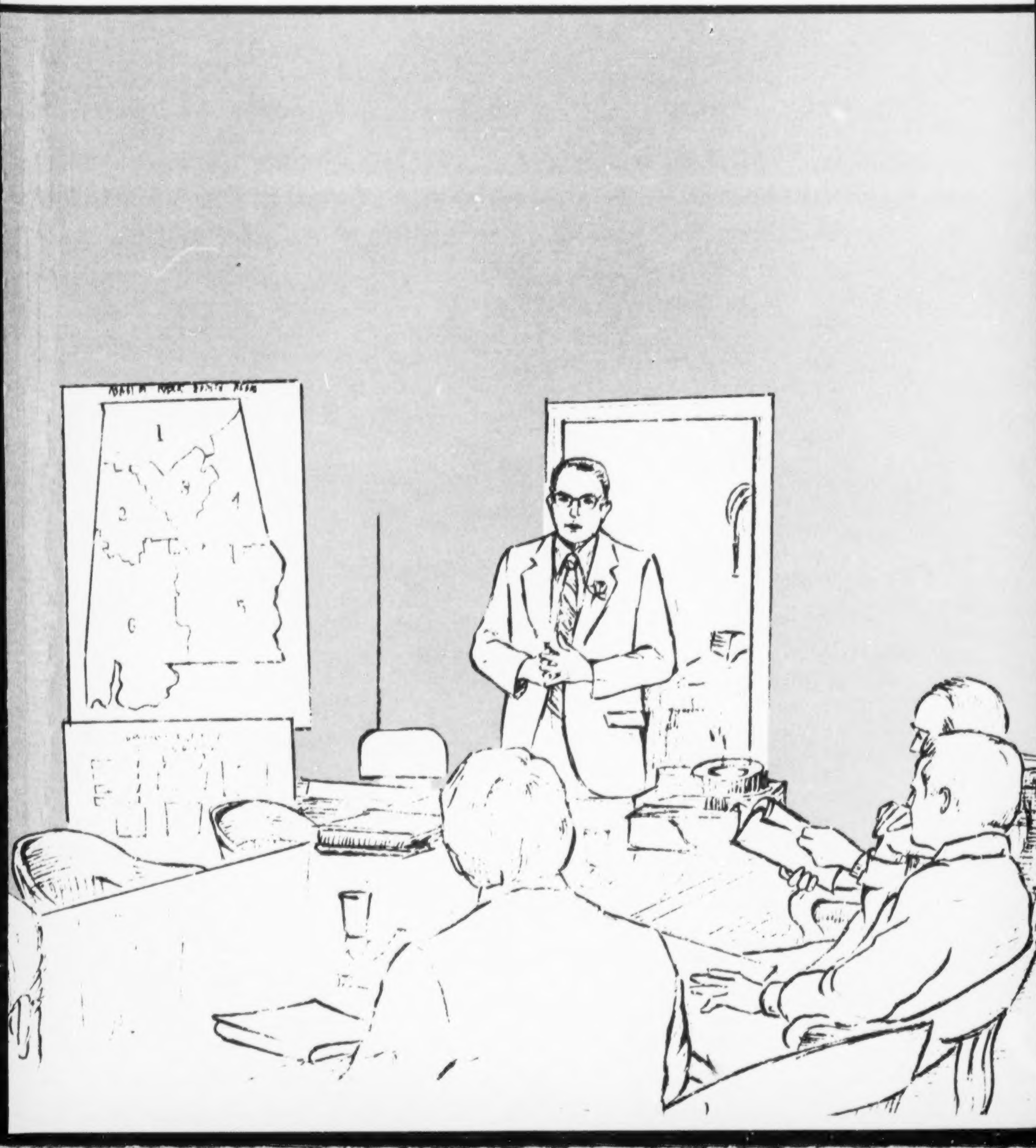
Council on Health Costs,
Administration &
Organization
W. S. (Bill) Fuller
Birmingham

Council on Animal &
Environmental Health
William R. Miller, D.V.M.
Auburn

ORGANIZATION OF THE ALABAMA DEPARTMENT OF PUBLIC HEALTH


STATE GOVERNMENT
BOARD OF HEALTH
STATE COMMITTEE OF PUBLIC HEALTH
Ira L. Myers, M.D.
State Health Officer
FAMILY HEALTH ADMINISTRATION
Beverly Boyd, M.D.
CLINICAL LABORATORY ADMINISTRATION
James L. Holston, Dr. P.H.
ENVIRONMENTAL HEALTH ADMINISTRATION
William T. Willis, M.S.
SPECIAL SERVICES ADMINISTRATION
Forest E. Ludden, Ed.D., M.P.H.
BUREAU OF PREVENTIVE HEALTH SERVICES
Grover C. Dick, M.A.
BUREAU OF PUBLIC HEALTH NURSING
Anne M. Smith, M.S., R.N.
BUREAU OF EPIDEMIOLOGY & CONSULTATION
Wallace E. Birch, D.V.M.
BUREAU OF AREA HEALTH SERVICES
H. E. Harrison, B.S., M.P.H.
BUREAU OF DENTAL HEALTH
Naseeb L. Shory, D.D.S., M.P.H.
BUREAU OF LICENSURE AND CERTIFICATION
Tigner S. Zorn, B.S.

Administration



ADMINISTRATION

The Alabama Department of Public Health continues to modify its programs and emphases to meet the challenges of today within the socioeconomic, political climate. The indication of further cuts in funding necessitates the prioritizing of services to determine which expenditures can be reduced causing a minimum of damage to the public's health.

Inflation and changes in funding are problems with which the Health Department must cope. The 6.6 percent increase in funds expended for public health in 1982 does not keep up with double digit inflation. The change from categorical federal funds to block grants has adversely affected some program activities.

The full effect of proration had not been realized by the end of the calendar year, but adjustments to compensate for the changing economy had already begun. With proration being declared at the beginning of the 1983 fiscal year, further budget adjustments were made to mitigate the effect of reduced funds. Expenditures not essential to providing health care have been cut. As changes are made, the primary consideration must be the protection of the health of Alabamians.

Another concern is preserving the jobs of public health employees since the state's high unemployment rate will make securing jobs elsewhere difficult. Hopefully normal attrition will be the only reduction in staff that will be necessary. Being able to spread the budgetary adjustments over a longer period of time will make it easier for public health to cope with adverse circumstances.

The consulting firm, Arthur Young and Company, with which the Health Department contracted to study various aspects of the department, made its final report in 1982. The consultants reviewed financial reporting systems, operations, organizational structures and metholodogy for establishing priorities. Some of the consultants' recommendations have been or are being implemented. Others are being considered. Not all the recommendations are practical at the present time.

The Alabama Department of Public Health will fulfill its responsibility in protecting the public's health because of the dedication of its staff.

Division of Finance

The consultants concluded that better employee understanding of the Cost Accounting System is an important factor in capturing the valid, accurate cost of a unit of service. Revising the instruction manual and extending user training were recommended to gain employee acceptance and to reduce recurring errors. Primary Prevention staff assisted the Finance Division with revising and printing the *Instruction Manual of the Cost Accounting System* and in conducting training sessions in every county health department as well as for state public health employees.

The Finance Division is working very closely with the State Health Officer and all units of the department in reducing expenditures and in adjusting the budget. The task of funding essential public health services has been compounded by proration.

The division has continued its usual budgetary functions for the State Health Department and a majority of the local health departments. Some of its duties are purchasing and distributing equipment and supplies, validating and processing payment documents, maintaining payroll records of the state and county public health employees, and compiling financial data to project the budget needs of the department.

Tables 1-1, 1-2 and 1-3 summarize the reports of receipt and disbursement of funds.

Twenty years of dedicated service to the Health Department—Frances Smith, executive assistant to the State Health Officer.

TABLE 1-1
SUMMARY OF RECEIPTS, DISBURSEMENTS AND BALANCES BY SPECIAL SOURCE OF FUNDS
FISCAL YEAR 1982

Source	Balance 10-1-81	Receipts	Expended	Balance 9-30-82
STATE AND REVENUE FUNDS				
General Fund—Health	336,643.55	11,214,526.00	11,141,201.26	409,968.29
General Fund Transfers to Counties	—0—	6,729,474.00	6,729,474.00	—0—
ASETF Prenatal Transfer	293,356.22	791,706.00	703,297.88	381,764.34
ASETF Immunization	—0—	200,000.00	199,522.69	477.31
ASETF School Insp. Transfers to Counties	—0—	195,794.00	195,794.00	—0—
Total	629,999.77	19,131,500.00	18,969,289.83	792,209.94
2¢ Cigarette Tax	326,144.57	2,071,488.44	2,030,062.06	367,570.95
1¢ Cigarette Tax	298,641.38	1,392,626.31	1,172,681.06	518,586.63
Water Improvement Fines	385,709.06	43,300.00	429,009.06	—0—
Air Pollution Fines	114,739.97	50,000.00	164,739.97	—0—
Hospital Licenses	20,930.40	192,884.00	146,679.03	67,135.37
Vital Statistics Fees	491,616.90	1,049,431.80	857,849.66	683,199.04
Emergency Medical Services	68,778.73	52,131.95	16,505.20	104,405.48
Hazardous Waste Management	13,066.81	62,744.99	75,811.80	—0—
Hazardous Waste Perpetual Care	20,189.07	62,744.99	82,934.06	—0—
Total	1,739,816.89	4,977,352.48	4,976,271.90	1,740,897.47
Regulatory Boards				
Hearing Aid Dealers	13,844.13	7,325.00	15,099.62	6,069.51
Water Well Standards	5,022.08	28,494.00	33,516.08	—0—
Water Plant Operators	13,284.54	4,770.00	18,054.54	—0—
Registration of Sanitarians	18,812.13	75.00	—0—	18,887.13
Total	50,962.88	40,664.00	66,670.24	24,956.64
TOTAL STATE & REVENUE FUNDS	2.420,779.54	24,149,516.48	24,012,231.97	2,558,064.05
FEDERAL FUNDS				
Family Planning				
Title X	148,806.90	4,207,448.73	4,276,241.50	80,014.13
Title XIX	(101,234.92)	406,755.00	(161,629.06)	467,149.14
Patient Fees	229,139.83	425,718.34	147,910.84	506,947.33
Total	276,711.81	5,039,922.07	4,262,523.28	1,054,110.60
Maternal & Child Health				
Title V, Sec. A	91,313.22	(280,124.73)	(188,926.51)	115.00
Title V, Sec. B	10,222.96	613,206.09	623,429.05	—0—
Title V, Sec. MR	254.59	116,000.00	114,530.93	1,723.66
Improved Pregnancy Program	5,534.20	121,000.00	124,354.49	2,179.71
MCH—HIM	9,261.11	452,781.03	455,091.64	6,950.50
MCH—SECT. 330	890.50	(890.50)	—0—	—0—
ARC—SEICH	784.43	203,500.00	201,931.93	2,352.50
MCH—SIDS	257.98	60,625.00	60,506.26	376.72
Third Party Participation	277,590.70	162,365.76	36,316.20	403,640.26
Total	396,109.69	1,448,462.65	1,427,233.99	417,338.35
Environmental Protection Agency				
Water Improvement—74 IMPD	1,716.00	—0—	1,716.00	—0—
Water Improvement—Earned Fund	47,144.94	18,375.00	65,519.94	—0—
Water Improvement—106	47,502.12	1,558,603.00	1,606,093.31	11.81
Water Improvement—208	9,551.26	1,250.00	10,801.26	—0—
Water Improvement—208 1980	(13,531.32)	402,000.00	388,468.68	—0—
Water Improvement—UIC	15,354.58	222,625.00	227,325.54	10,654.04
Water Improvement 205—G	9,984.70	290,000.00	299,984.70	—0—
Total Water Improvement	117,722.28	2,492,853.00	2,599,909.43	10,665.85
Air Pollution	38,091.18	1,116,987.00	1,155,075.30	2.88
Safe Drinking Water	156,512.65	460,525.00	616,955.65	82.00
Solid & Hazardous Waste	114,244.45	588,727.50	702,774.85	197.10
Total	426,570.56	4,659,092.50	5,074,715.23	10,947.83

TABLE 1-1 (continued)
SUMMARY OF RECEIPTS, DISBURSEMENTS AND BALANCES BY SPECIAL SOURCE OF FUNDS
FISCAL YEAR 1982

Source	Balance 10-1-80	Receipts	Expended	Balance 9-30-81
Block Grants				
MCH Block	—0—	5,210,150.00	5,117,380.37	92,769.63
Preventive Health Block	—0—	825,000.00	794,364.67	30,635.33
Total	—0—	6,035,150.00	5,911,745.04	123,404.96
U.S. Public Health Service				
Emergency Medical Services	(30,730.07)	747,000.00	716,261.95	7.98
Comprehensive Health—314 D	3,112.73	(3,112.73)	—0—	—0—
Refugee Program	—0—	22,000.00	21,872.48	127.52
Hypertension	11,520.42	55,500.00	67,013.61	6.81
RHI Planning	—0—	5,000.00	5,000.00	—0—
Home Health	5,891.74	(5,891.74)	—0—	—0—
Rural Health Affairs	11,068.84	25,000.00	33,704.62	2,364.22
Total	863.66	845,495.53	843,852.66	2,506.53
Center for Disease Control				
Risk Reduction	(44.20)	278,000.00	271,243.71	6,712.09
Dental	42,859.10	145,000.00	187,406.88	452.22
Venereal Disease	13,435.22	569,400.00	581,975.50	859.72
Immunization	39,266.83	250,000.00	288,456.61	810.22
Influenza	85.68	4,132.54	4,218.22	—0—
Total	95,602.63	1,246,532.54	1,333,300.92	8,834.25
Other Federal Funds				
S.S.A. Certification	(98,038.79)	402,000.00	299,958.21	4,003.00
A.E.C Radiological Health	34,114.28	24,748.43	57,643.45	1,219.26
Dept. of Agriculture—WIC Food	265,823.15	19,250,003.00	19,262,025.25	253,800.90
NIH Cancer	4,855.06	—0—	—0—	4,855.06
Home Health Escrow	431,449.14	324,868.15	635,935.00	120,382.29
Home Health Administration	105,482.70	186,511.00	70,396.12	221,597.58
Emergency Medical Services—ARC	46.69	142,700.00	142,644.09	102.60
NCH Vital Statistics	3,074.93	70,200.00	73,041.70	233.23
Total	746,807.16	20,401,030.58	20,541,643.82	606,193.92
TOTAL FEDERAL FUNDS	1,942,665.51	39,675,685.87	39,395,014.94	2,223,336.44
LOCAL & MISCELLANEOUS FUNDS				
Dental Contracts	6,498.98	27,399.17	8,811.73	25,086.42
Lab—Rubella	3,537.65	15,790.00	355.00	18,972.65
Environmental Lab.	(7,848.22)	180,000.00	172,151.78	—0—
Lab. MCH	—0—	125,000.00	54,788.01	70,211.99
Indirect Cost Earned	1,289,218.02	2,547,137.89	2,040,609.72	1,795,746.19
Laboratory—Sickle Cell	55,314.14	48,900.10	76,306.36	27,907.88
Consumer Product Safety	—0—	17,956.00	—0—	17,956.00
Vital Statistics	94,289.46	94,217.82	62,947.73	125,559.55
Contract Safe Water Lab.	7,956.77	30,000.00	23,344.58	14,612.19
Lab. Training	2,379.05	100.00	—0—	2,479.05
OHTS—Child Restraint	(3,436.65)	32,595.49	36,183.48	(7,024.64)
Miscellaneous Reimbursement	(90,233.61)	603,252.59	531,633.38	(18,614.40)
Health Nuclear Monitoring	25,461.69	31,357.41	16,736.45	40,082.65
Local Appropriations	3,935,165.80	28,532,219.16*	27,921,994.39*	4,545,390.57
Total	5,318,303.08	32,285,925.63	30,945,862.61	6,658,366.10
GRAND TOTAL	9,681,748.13	96,111,127.98*	94,353,109.52*	11,439,766.59

*Includes 18,294,211.00 in funds collected and expended locally

TABLE 1-2
SUMMARY OF PROGRAM DISBURSEMENTS BY GENERAL SOURCE OF FUNDS
FISCAL YEAR 1982

Program	All Funds	State & Revenue Funds	Federal Funds	Local & Other Funds
ADMINISTRATION				
Executive	275,756.20	275,711.20	—0—	45.00
General Services	2,024,785.98	356,187.66	90,520.50	1,578,077.82
Finance	595,343.32	595,343.32	—0—	—0—
Internal Audit	83,472.46	83,472.46	—0—	—0—
Legal Services	92,504.49	92,309.49	—0—	195.00
Personnel	183,751.26	183,108.58	—0—	642.68
Total	3,255,613.71	1,586,132.71	90,520.50	1,578,960.50
SPECIAL SERVICES				
Administration	56,235.39	—0—	—0—	56,235.39
Vital Statistics	937,656.33	857,902.29	73,041.70	6,712.34
Primary Prevention	711,596.81	403,892.77	271,520.56	36,183.48
Health Data	790,658.56	790,641.78	—0—	16.78
Total	2,496,147.09	2,052,436.84	344,562.26	99,147.99
HEALTH SUPPORT SERVICES				
Public Health Area Support	202,949.00	179,161.85	21,872.48	1,914.67
Rural Health	53,723.66	—0—	50,548.99	3,174.67
Public Health Nursing	363,245.78	292,878.67	70,367.11	—0—
Public Health Area I Admin.	81,539.64	69,119.51	—0—	12,420.13
Public Health Area II Admin.	121,160.14	107,687.37	—0—	13,472.77
Public Health Area III Admin.	93,971.68	93,971.68	—0—	—0—
Public Health Area IV Admin.	114,918.11	103,147.05	—0—	11,771.06
Public Health Area V Admin.	92,383.90	92,383.90	—0—	—0—
Public Health Area VI Admin.	11,518.25	11,463.40	—0—	54.85
Rape Prevention	26,813.32	—0—	26,813.32	—0—
Rodent Control—Tuscaloosa	26,391.35	—0—	26,391.35	
Rodent Control—Mobile	32,126.00	—0—	32,126.00	—0—
Clinical Laboratories	3,926,281.19	3,666,637.97	104,804.13	154,839.09
Baldwin County Home Health	7,212.84	—0—	7,212.84	—0—
Total	5,154,234.86	4,616,451.40	340,136.22	197,647.24
PLANNING, DEVELOPMENT & REGULATION				
Emergency Medical Services				
State Operation	312,610.13	129,480.97	149,492.61	33,636.55
District Implementation	842,120.26	—0—	842,120.26	—0—
Total EMS	1,154,730.39	129,480.97	991,612.87	33,636.55
Licensure & Certification	887,312.63	146,679.03	300,003.21	440,630.39
Total	2,042,043.02	276,160.00	1,291,616.08	474,266.94
ENVIRONMENTAL HEALTH				
Administration	121,186.59	121,186.59	—0—	—0—
Environmental Laboratory	392,584.88	220,433.10	—0—	172,151.78
General Sanitation	214,726.15	214,726.15	—0—	—0—
Vector Control	28,787.59	—0—	28,787.59	—0—
Inspection	681,202.39	681,202.39	—0—	—0—
Public Water Supplies	826,739.64	209,783.99	616,955.65	—0—
Radiological Health	329,214.63	254,834.73	57,643.45	16,736.45
Solid and Hazardous Waste	1,215,073.99	490,646.45	702,774.85	21,652.69
Water Improvement Commission	3,527,222.03	927,328.59	2,599,893.44	—0—
Air Pollution Control Commission	1,950,717.85	795,642.55	1,155,075.30	—0—
Total	9,287,455.74	3,915,784.54	5,161,130.28	210,540.92
PREVENTIVE HEALTH SERVICES				
Administration	73,559.59	73,559.59	—0—	—0—
Cancer	365,092.25	365,092.25	—0—	—0—
Epidemiology	138,086.43	138,086.43	—0—	—0—
Hypertension	456,418.01	87,250.19	369,167.82	—0—
Immunization	628,435.94	330,492.12	297,943.82	—0—
Tuberculosis Control	1,930,448.88	1,569,388.31	—0—	361,060.57
Hospitalization of T.B. Patients	650,550.00	650,550.00	—0—	—0—
Venereal Disease Control	1,090,021.09	414,613.26	581,975.50	93,432.33
Total	5,332,612.19	3,629,032.15	1,249,087.14	454,492.90

TABLE 1-2 (continued)
SUMMARY OF PROGRAM DISBURSEMENTS BY GENERAL SOURCE OF FUNDS
FISCAL YEAR 1982

Program	All Funds	State & Revenue Funds	Federal Funds	Local & Other Funds
FAMILY HEALTH SUPPORT				
Family Planning	4,264,083.16	—0—	4,264,083.16	—0—
Women, Infants, & Children Food	19,262,025.25	—0—	19,262,025.25	—0—
Maternal & Child Health				
Block Grant—Transfer to Cripple Children	1,829,721.23	—0—	1,829,721.23	—0—
Administration	425,278.14	—0—	425,278.14	—0—
MCH Special Project Contracts	2,496,361.93	645,052.26	1,851,309.67	—0—
MCH Area Support	1,463,086.15	—0—	1,463,086.15	—0—
Mental Retardation	196,500.13	—0—	196,500.13	—0—
Maternal & Infant Care	2,109.77	—0—	2,109.77	—0—
Improved Preg. Outcome	3,693.37	—0—	3,693.37	—0—
Improved Child Health	656,763.88	—0—	656,763.88	—0—
SIDS	60,603.86	—0—	60,603.86	—0—
Total MCH	7,134,118.46	645,052.26	6,489,066.20	—0—
Dental Health	360,814.19	299,243.83	52,758.63	8,811.73
Dental Flouridation	214,094.22	—0—	214,094.22	—0—
Total	31,235,135.28	944,296.09	30,282,027.46	8,811.73
REGULATORY BOARDS				
Cert. of Water Plant Operators	18,054.54	18,054.54	—0—	—0—
Hearing Aid Board	15,099.62	15,099.62	—0—	—0—
Water Well Standards Board	33,516.08	33,516.08	—0—	—0—
Total	66,670.24	66,670.24	—0—	—0—
HOME HEALTH ESCROW TRANSFER	635,935.00	—0—	635,935.00	—0—
LOCAL HEALTH UNITS	34,847,262.39	6,925,268.00	—0—	27,921,994.39*
GRAND TOTAL	94,353,109.52	24,012,231.97	39,395,014.94	30,945,862.61

*Includes $18,294,211.00 in funds collected and expended locally

Laurene Caldwell in the purchasing section coordinates activities among state buyers, vendors and department staff to secure equipment and supplies needed for employees to perform their duties.

Payroll reports from the county health departments are processed in the Division of Finance. Evelyn Murphree also sorts the checks and forwards them to the appropriate county.

TABLE 1-3
SUMMARY OF DISBURSEMENTS BY OBJECT
FISCAL YEAR 1982

Object	Expended
Salaries	17,967,013.28
Fringe	4,927,429.97
Travel—In-State	1,135,604.71
Travel—Out-of-State	63,976.14
Repairs and Maintenance	169,088.55
Rentals and Leases	835,670.40
Utilities and Communication	1,297,954.64
Professional Services	2,810,096.58
Supplies and Materials	1,208,473.21
Drugs and Medical Supplies	1,393,054.11
Food—Women, Infants and Children	15,177,537.25
Indirect Cost	2,166,037.18
Training	23,532.89
Transportation & Equipment Operations	170,319.55
Grants and Contracts	12,133,071.48
Capital Outlay	1,600.00
Transportation Equipment Purchases	93,330.78
Other Equipment Purchases	617,638.34
Non-Expenditure Disbursements	4,239,686.07
County Health Departments	27,921,994.39
Total	94,353,109.52

Internal Audit Division

The Internal Audit Division conducted on-site financial surveys in 50 counties in 1982. The information gathered will be used in developing a standardized accounting and periodic reporting system to be implemented in the county health departments. Better documentation of the expenditure of funds will accrue from this project.

Before final execution of contracts and agreements involving the Health Department, this division as well as the State Health Officer and the Finance and Legal divisions reviewed and approved them. In 1982, 229 contracts and agreements were processed through this system.

The division met with the State Examiners of Public Accounts and auditors from the federal government and private firms. The division represented the State Health Officer in these auditing matters. Subsequently audit findings were discussed with the directors of certain State Health Department administrations, bureaus and divisions.

After evaluating the audit impact of certain legislation, the division made recommendations pertaining to those legislative actions.

Intoxication Standards, Testing and Control

The Health Department works with local, county and state law enforcement officials in implementing the law which authorized chemical testing to determine whether a driver is intoxicated. This unit of the department monitors training and supervises the general scientific aspects of the statewide program. It provides professional support so that the courts will accept the scientific results.

At the end of 1982 there were 219 of the instruments which the Health Department has approved for testing the breath to measure blood alcohol content. Therefore each law enforcement agency in the state has access to an instrument. The 216 new operators trained in 1982 bring the total active operators to 1,800. All previously approved operators attended review sessions.

Legal Division

The Legal Division was staffed in 1982 by three attorneys and one secretary. One attorney was detailed to the Solid and Hazardous Waste Division; and on October 1 when the division was transferred to the Department of Environmental Management, the attorney likewise was transferred.

In their capacity as assistant attorneys general, division attorneys served on the Opinions Committee of the Office of Attorney General, providing review, comments and recommendations; researched and wrote opinions; represented the Attorney General in providing legal assistance and counsel to various state boards; and consulted and coordinated with the Attorney General on public health matters in general.

The Legal Division served as the office of primary responsibility for meeting the requirements of the Alabama Administrative Procedure Act. All State Board of Health regulations were compiled according to Office of Legislative Reference Service format and were filed with that office. The *State Board of Health Administrative Code* will be maintained by the Legal Division, as will the *Alabama Administrative Monthly*, a publication of emergency and proposed rules, produced by the Office of Legislative Reference Service on a monthly basis.

During 1982 division attorneys represented the Board of Health, county boards of health, the department and its personnel in over 30 actions before state and federal courts and administrative bodies. Cases dealt with enforcement of hazardous waste regulations, sewage disposal, jail inspections, vital statistics, rabies, civil rights and various tort actions.

Division attorneys served as hearing officers for Alabama Water Improvement Commission hearings; Women, Infants and Children (WIC) Program hearings;

public hearings on State Board of Health rules; hospital and nursing home licensure revocation hearings; Board of Adjustment hearings; and personnel administrative hearings.

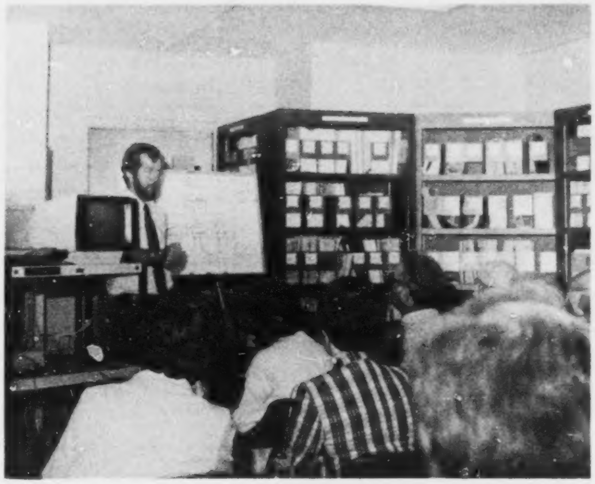
The Legal Division functioned as in-house counsel to all offices of the State Health Department and to the majority of the county health departments. Attorneys reviewed for legal sufficiency all contracts, leases and other instruments as well as correspondence. Legal review and rewrite was provided on new and existing State Board of Health rules adopted or amended during the year. Staff counsel furnished legal advice on a day-to-day basis to staff members of the state and county health departments involving interpretations of statutes and regulations and appropriate legal and administrative actions to be pursued in their enforcement.

Personnel and Training Services Division

Considerable time was spent in 1982 by the division in implementing the statewide classification and pay study which the State Personnel Department began on August 4, 1980. All of the employees in the Health Department were converted to a new pay plan on May 26, 1982, with approximately 339 positions being reallocated to different classifications.

The combined recruitment efforts of the Health Department and State Personnel have resulted in 283 nurses being placed on the registers for possible employment throughout the state. Other recruitment figures were: 109 environmentalists, 45 microbiologists, 18 public health engineers, 56 health educators, four public health physicians, 243 health services aides, 20 nurse practitioners, 13 solid waste officers and one radiation physicist.

A close tie exists between the employees in the county health departments and the Personnel Division since personnel records are maintained at the state office.



Workshops are essential in many units of the department to keep employees up-to-day on changes in procedures and activities.

Personnel and Training Services experienced the greatest reduction in training service capability due to the 15 percent proration in 1982. As a result of loss of budgeted funds, the division cancelled several training projects set to begin in the latter part of the year. Among the most critical were (1) a public health manager training program designed in six sequential levels of instruction to cover management principles and techniques to assist health officers and administrators to cope with changing health programmatic philosophy and funding mechanisms, (2) performance evaluation training workshops designed to assist rating supervisors in accomplishing valid performance ratings and (3) clerical and office manager training workshops which were designed to upgrade the skills of clerical staff. Considerable time and effort were devoted to planning these training programs, and it is hoped that funds will be restored very soon.

Of the 1,835 employees on the payrolls at the end of the year, 603 were state employees and 1,232 were county employees. The employees of Jefferson and Mobile counties are not included in these totals since they function under different merit systems. Accessions totaling 373 consisted of 183 original probationary, 56 provisional, 33 temporary, 32 reemployment, 25 transfer and 42 unskilled appointments. There were two nonstatus to probationary appointments and 49 promotions for this period.

Separations numbered 551 of which there were 167 resignations, one death, 99 expirations of appointment, 10 layoffs, 9 dismissals and 242 transfers. (Legislative action transferred 192 employees to the new Department of Environmental Management.)

The racial composition of the work force, as summarized in Table 1-4, reflects the effect of the department's Affirmative Action Plan.

TABLE 1-4
ANALYSIS OF WORK FORCE
1982

Employees	Number	Percent
White Male	352	19.18
Black Male	71	3.86
White Female	1,092	59.51
Black Female	317	17.28
Hispanic Female	2	0.11
Oriental Female	1	0.05
Total Minorities	319	21.31
Total Female	1,412	76.95
Total Labor Force	1,835	100.00

With 21.3 percent of the employees being minorities, the Health Department compares favorably with the Alabama labor market of 22 percent minorities.

During 1982 new appointments consisted of 15 white males (9 percent), 111 white females (66 percent), 3 minority males (3 percent) and 37 minority females (22 percent). The 25 percent minority appointments represent an improvement over last year.

In conjunction with the upward mobility emphasis of the Affirmative Action Plan, 13 percent of the promotions during the past year were minorities. Also there was an increase in the number of females in the administrative categories. As reflected by the preceding statistics, the department is progressing to a work force representative of the labor market in Alabama.

A basic objective during 1982 was to achieve a more uniform approach to the department's policy of progressive discipline. Through its employee relations officer, the division was able to respond to orientation and training which resulted in more effective personnel actions being taken at progressive stages. The principle of progressive discipline is improved employer/employee relations through more effective communication with employees and the provision for the employee to have an opportunity for his concerns to be heard and a time established for resolution of problems.

A major function of this division is to provide support in resolving complaints and grievances involving employees. During calendar year 1982 there were 38 formal complaints, of which 30 (79 percent) were at the county level and eight (21 percent) were at the state level. Twenty (53 percent) of the complaints involved minority employees.

Twenty-eight complaints were filed by supervisors against employees. These consisted of 12 related to performance, six for leave abuse, two for insubordination, two related to integrity, two for fighting, two for using threatening and abusive language, and two for sexual harrassment.

Appropriate due process in the resolution of these complaints resulted in five resignations, two terminations, three suspensions, four transfers, two official reprimands, one retirement and 11 administrative resolutions.

Employees filed two complaints with the Equal Employment Opportunity Commission, alleging racial discrimination, and one complaint with the Office of Civil Rights under Section 504, alleging handicap discrimination. Five private law suits were filed, and two complaints were registered with the Personnel Division.

The Equal Employment Opportunity Commission issued no fault findings on both complaints filed with them, and the Office of Civil Rights ruled that the department had made reasonable accommodations to the employee who alleged handicap discrimination. The two complaints filed with the Personnel Division were administratively resolved. The five law suits were filed under the Right to Sue provision after the employees had filed with EEOC and received no fault findings in favor of the department. In one case a decision has been rendered in favor of the agency, and four cases are still pending in the courts.

Public Health Areas

PUBLIC HEALTH AREAS

PUBLIC HEALTH AREA I

Twelve counties forming the top tier of Alabama comprise Public Health Area I. These counties are diverse in economic and social structure, population, educational background, and types and levels of health care provided. The organization of the twelve health departments is also very different. There are one four-county district, one three-county district, one two-county district, one large urban health department and two single rural health departments. The two larger districts are staffed with health officers, nursing directors and environmental health directors; the urban health department has a health officer; the two-county district has an administrator; and the two single rural counties are managed by the area administrative team. In 1982 a physician was hired as the health officer for the Northwest Regional Health Department, the three-county district. Quarterly meetings of the administrative staffs of all the counties have been scheduled to discuss mutual problems and to provide in-service administrative education and training.

Personal Health Services—To enhance the quality of health care, emphasis has been placed on orientation of new personnel, upgrading management and nursing skills, increasing efficiency in clinics, scheduling, and staffing. Staff development programs, in-service training and workshops related to home health care, tuberculosis, fluid and electrolyte balance, general management have been scheduled. An educational group of nurse practitioners met quarterly for the purpose of problem solving. Quarterly meetings of county supervisors have been started to improve communication and administrative skills in nursing.

All nurses are required to obtain nurse practitioner certification. Also they are required to carry professional malpractice insurance.

An infant safety automobile seat program has been either coordinated or initiated by the health departments in Franklin, Colbert, Lauderdale, Marshall and Morgan counties. Limestone and Cullman counties are in the process of establishing programs.

A motivational promotion for pediatric clinic attendance has been started in Tri-County District Health Services. Babies who miss no appointments receive a T-shirt with "I'm a Perfect Tri-Co Kid" on the front. These are given at six, 12 and 24 month intervals.

A very active epidemiological surveillance program has been initiated for the area with a staff physician serving as the consultant for the program. A more in-depth evaluation of infectious disease outbreaks and the standardization of corrective measures have resulted from the increased epidemiological surveillance.

Environmental Health Services—During 1982 the environmental health program of Public Health Area I has tried to improve the delivery of environmental sanitation and inspection services to the public. One approach has been to provide better tools with which environmentalists work. Standard operating procedures have been developed to support the environmentalists in the field. Legal forms have been prepared to implement more effectively the rules and regulations by improving record keeping, documentation and enforcement.

To improve the quality of the inspection programs, legal notice, septic tank inspection and on-site sewage disposal system evaluation forms have been developed and put into use. The legal notice form has proved effective in gaining compliance. Whenever it has been used, compliance has been 100 percent. The septic tank inspection form has provided a guide and documentation to ensure thorough inspection of systems. The site evaluation form has helped equally for site evaluations.

Efforts to improve skills, job knowledge and morale of the environmentalists have been initiated by providing specific training for particular areas of work, on the job training and in some cases retraining. Employees are encouraged to participate in as much training as possible. Morale is improving because of better self-image and attitude by enhancing the environmentalists' appearance, knowledge, skills, and professionalism and by having support available.

Better supervision and record keeping have increased quality and quantity of performance. Some work has been reallocated, and work priorities have been established. When audits and surveys have revealed weaknesses, these are being strengthened, and recommendations are being implemented.

Data which environmentalists compile are in the process of being computerized. Computerization will help in evaluating and reporting activities. The need justifies continued efforts to put the information on computer.

New areas of activity are being pursued. In the last quarter of 1982, a new program in inspecting septic tank manufacturers and approving or disapproving the design and construction of septic tanks was initiated.

It is anticipated that many improvements which have been made will continue.

PUBLIC HEALTH AREA II

Health promotion and disease prevention are purposes of the seven West Alabama county health departments which make up Public Health Area II.

Personal Health Care—Table 2-1 gives the numbers of clients served in various clinics. For the area, clinic encounters decreased about 14.8 percent in 1982. Well child clinic encounters with a 5.3 percent increase and sexually transmitted disease clinics, up 51.8 percent, were the nursing services which registered increases. The

TABLE 2-1
PHA II CLINIC ENCOUNTERS
FISCAL YEAR 1982

County	STD	Tuberculosis	Immunizations	Family Planning	Maternity	Well Child	EPSDT	Home Health
Bibb	0	328	1,715	1,233	773	240	98	1,282
Greene	34	524	1,434	1,521	289	159	115	885
Lamar	36	548	2,086	774	57	242	109	1,508
Pickens	69	996	2,966	1,099	498	526	237	1,655
Tuscaloosa	5,914	7,228	9,606	7,169	4,163	1,652	1,044	4,587
Fayette	52	943	2,456	826	80	42	92	947
Hale	0	683	2,224	1,232	0	216	99	1,143
TOTAL	6,105	11,250	19,521	13,854	5,860	3,077	1,794	12,007

decreases ranged from 9.4 percent in home health care to 28.5 percent in EPSDT. The inability to retain staff because of noncompetitive salaries has contributed to the problem; however no service has been discontinued.

Generalized nursing staff have followed epidemiologically all reported communicable diseases and have conducted 415 investigations.

The number of patients in the Home Health Program increased from 193 to 220 during fiscal year 1982. In addition to the 12,007 home health visits, 193 evaluation visits were made, and it was determined that no skilled nursing care was needed.

A hospice began operation in Tuscaloosa County in May 1982. Mutual referral of the hospice and the Tuscaloosa County Health Department augments the services to the patients of both agencies. The hospice refers patients to the Tuscaloosa County Health Department for skilled nursing care. In turn health patients receive social services, ministerial guidance and a variety of other services which volunteers provide through the hospice.

The Maternal and Child Health Program was enhanced by a special perinatal project using state appropriated funds. The nutrition educator made 1,205 contacts with prenatal patients and 53 contacts with high risk infants for nutritional assessment and counseling. The nurse educator made post-delivery visits with 279 women who had been prenatal patients at the Health Department. The need for postpartum care for themselves and the importance of preventive health care for their infants as well as sick care when needed were emphases of these visits. Project funds were also used for home visits to high risk infants.

Nutrition education is also an important component of the WIC Program. The nutritionists provide individual dietary counseling to each program participant. Other staff reinforce this with nutrition information each month when recipients pick up the food vouchers. The recipients use the vouchers to secure foods high in nutrients usually lacking in the diets of those eligible for the program. An average of 3,575 participants enrolled in the program in 1982, and an average of 3,334 benefited from the program monthly.

The West Alabama District Health Department strives to improve the dental health of children. Efforts are directed to assure optimal dental health through education, treatment and prevention of dental disease. Treatment is provided to children up to age 21 with 4,570 patient visits being made during fiscal year 1982. Dental health education was provided to 13,459 elementary school students, and dental films were shown in 463 classrooms. Dental health consultants visited each classroom to teach the students proper care of their mouths. A weekly sodium flouride mouthrinse program reached 8,625 elementary students in Tuscaloosa, Pickens, Bibb and Fayette counties. Lamar, Greene and Hale counties were added in September to increase students to 14,256.

For the fourth consecutive year gonorrhea morbidity declined in Tuscaloosa County, but 26 cases of penicillin resistant gonorrhea were confirmed in Tuscaloosa County. The Health Department continues to cooperate with the emergency room at Druid City Hospital in caring for females with positive gonorrhea.

Environmental Health Services—Many changes and challenges occurred in environmental health activities in 1982. The state totally absorbed the milk and dairy program and transferred an environmentalist to the state program. By February local health departments had been given authority to approve aerobic systems for sewage disposal. Since construction was not so extensive as in previous years, the responsibility was not significantly burdensome.

In April Tuscaloosa County had problems with solid waste disposal because the baleplant experienced expensive mechanical problems which added to operation difficulties at the balefill. The State Health Department assisted in gaining compliance with regulations. Tuscaloosa city officials spearheaded a proposal to build a steam generating plant to burn garbage to provide steam for the B.F. Goodrich Company. The plant is being engineered.

An air pollution problem alarmed citizens and forced Northport schools to close. A study funded by the state has not conclusively identified the source.

During April environmental health within the district began charging a fee to complete forms necessary for loan approval for FHA, VA and Farm Home on houses. The completion of these forms is not required by environmental health regulations.

Several horses in Pickens and Tuscaloosa counties died from Eastern equine encephalitis. Environmentalists investigated and monitored the disease to prevent an epidemic. The disease which is transmitted to man by mosquitoes can be fatal. Environmentalists in both counties worked with city and county officials to increase adult mosquito spraying and thus reduce the possibility of an outbreak.

A summary of inspection activities is given in Table 2-2.

Since Eastern equine encephalitis is transmitted to humans by mosquitoes, environmentalists worked with local officials to prevent an epidemic.

TABLE 2-2
SELECTED ENVIRONMENTAL ACTIVITIES FOR PHA II
FISCAL YEAR 1982

	Bibb County	Fayette County	Greene County	Hale County	Lamar County	Pickens County	Tuscaloosa County	Total
Food Inspections	213	459	240	410	436	200	1,980	3,938
Lunchroom Inspections	77	50	64	96	53	57	420	817
Day Care Inspections	11	4	2	2	5	9	76	109
Frozen Dessert Samples Collected	24	46	33	9	27	40	438	617
San 3's Approved	54	20	25	20	30	23	227	399
Septic Tanks Approved	57	23	14	16	27	35	485	657
Subdivisions Approved	0	0	1	0	1	1	12	15
Swimming Pool Inspections	2	0	4	0	4	0	8	18
Animal Bite Investigations	6	11	6	8	21	34	81	167
Hotel/Motel Inspections	0	8	6	16	9	12	59	110
Jail Inspections	3	39	8	36	8	9	14	117
Private Dwelling Inspections	3	0	0	0	0	0	119	122
TOTAL	450	660	403	613	621	420	3,919	7,086

PUBLIC HEALTH AREA III

Since Jefferson County is so different from the other counties in Public Health Area III, it functions as a unit; and the other five counties constitute the Central Alabama Public Health Region.

Administration in Jefferson County—The Jefferson County Department of Health is developing a modern financial management system. The components of the system are accounts receivable, accounts payable, purchasing, central stores, fixed assets and payroll.

The renovation and expansion of the Northern Health Center, which is nearing completion, marks the end of a ten year program of modernization. Since 1973 six of the eight Jefferson County health centers have been replaced or expanded and renovated. The size of the centers has doubled.

Contracts have been established to supplement medical coverage and to make the department available as a training site for residents. Through a contract full-time adult medical coverage is available at Western Health Center. Physician coverage in adult medicine is provided at Bessemer Health Center by an agreement with Cooper Green Hospital. Through a contract with Children's Hospital residents do a one-month rotation at the Bessemer Health Center at which they are assigned to the staff pediatrician. This plan allows the center to serve more people, provides improved training in child health care for third year pediatric residents, and assures continuity of care of center patients who are referred to Children's Hospital for emergency treatment and specialty clinics.

Administration of Central Alabama Public Health Region—At the present time this region is a loosely knit collection of counties, but ties are developing to facilitate administration and programming. Area staff are the key to the direction of programming, the integration of activities and the development of consistency in the region. The Area III state staff form the core of the region staff.

The rural health departments have less local funding than Jefferson County; so they benefit from their association with Jefferson County. With proration of state funding, funds in the rural counties are inadequate to assure continued service; but many programs have advanced despite less than ideal conditions.

Personal Health Care in Jefferson County—The Tuberculosis Control Program is participating in a study comparing six-month treatment regimen for uncomplicated pulmonary tuberculosis with a nine-month control regimen. This study is sponsored by the Tuberculosis Control Division of the Centers for Disease Control.

Investigation of 260 cases of suspected or confirmed tuberculosis and clinical evaluation of 2,964 persons exposed to these cases were part of the program activities. An average of 271 patients per month were treated for tuberculosis. Preventive therapy was prescribed for more than 1,000 county residents.

The Jefferson County Department of Health is one of five county health departments collaborating with CDC in an extensive study of the epidemiology of acute viral hepatitis, particularly Hepatitis B. Information from the study will be used to define high risk groups who would benefit from the recently approved Hepatitis B virus vaccine.

The 298 cases of early infectious syphilis were 92.3 percent more than the previous year. Gonorrhea increased slightly in 1982. Penicillin resistant gonorrhea was reported for the first time in Jefferson County with 15 cases being identified during the fiscal year.

The Sexually Transmitted Disease Program and the School of Public Health at the University of Alabama in Birmingham are cooperating in a study to assess the effect of vaginal spermicide use on incidence of gonorrhea.

Complete immunization of two-year old children in Jefferson County rose from 80.2 percent the previous year to 91.5 percent in 1982.

Jefferson County's Bureau of Dental Health operates four stationary and three mobile dental clinics. For the first time all three dental trailers were operated on a full-time basis which will make it possible to visit most schools annually rather than every two or three years.

Emphasis was placed on ensuring that maternity patients get early and consistent prenatal care. Prenatal visits increased about 10 percent.

A family planning nurse made more than 100 home visits to teenage mothers' 16 years old or younger. The purpose of the visits was to teach them how to care for their babies, to encourage them to complete their education and to counsel them about family planning to prevent repeat pregnancies.

The staff of Teen Self Health, a family life education series was reduced from three to one. Consequently the scope of the program will decrease drastically.

In addition to routine activities, public health nurses participated in a clinic conducted for Cambodian and Vietnamese refugees.

The Home Care Program provided 55,460 visits to serve 1,484 patients.

The Birmingham Area Hospice Program has been established to provide home care and grief counseling to the terminally ill and their families. The program is staffed by a multidisciplinary team.

The Western Mental Health Center offers comprehensive, community based mental health services to residents in Western Jefferson County. The center operates a satellite office at the Bessemer Health Center. Clinical services and consultation and education are the two major components of the program.

In the past two years monthly admissions have more than doubled to an active monthly case load of some 1,600. The increased demand for services seems to be directly related to the area's growing unemployment. Despite the spiraling need for mental services, a cut in federal funds has reduced the staff. As a result emphasis has been placed on services for patients who are chronically and severely mentally ill.

Personal Health Services for the Central Alabama Public Health Region—The nursing services have been leaders in many advancements in the region. Improvement in quality assurance and in documentation of clinical services has been noticeable. Outdated services have been eliminated, and the local health officer has updated standing orders for family planning and maternity nurses. Emergency protocols have been developed in each local health department and have been standardized for the region. The quality of home health services has improved in each county, and home health reimbursements have allowed more flexibility in other programs. Areawide meetings of nursing personnel have been initiated and appear to facilitate communication.

The area nursing supervisor has become the project director for the Regional Perinatal Advisory Committee's Rural High Risk Pregnancy Project. This project enables expert obstetrical evaluation and medical testing for maternity clinic women who have high risk problems.

Follow-up of communicable diseases and epidemiology is handled by nursing supervisors in each county.

The Venereal Disease Control Program has problems in screening, patient contact and treatment due to lack of local physician involvement in some counties and lack of coordination of activities between nurses and VD representatives. Health officer clinics are being initiated in most counties, and standing orders for nurse practitioners to administer oral ampicillin treatment for gonorrhea should improve patient service. Problems with culture transport have been largely resolved with each county making its own arrangements. Gonorrhea, pencillin resistant gonorrhea and syphilis have increased in this region, but the decrease in new cases in the last quarter is encouraging.

In anticipation of the unified medical record system, steps have been taken to incorporate WIC services into well child and maternity services. Blount County was selected as one of the pilot counties in the Unified Medical Record Test Program.

Cancer detection programming for the region is now handled locally.

Walker County has the only black lung clinic in the state. In the first year the clinic was only moderately successful because victims are reluctant to undergo additional medical tests and local physicians are not supportive. The program has eliminated the medical component for most patients and now consists predominantly of the educational component.

In 1981 Shelby County approved a local fee bill which will provide funds to expand programs. Despite increased local support, clinical services have been affected. Clinics at Vincent and Montevallo have been reduced. Family planning visits have decreased about 12 percent, particularly among teenagers. But Well Baby Clinic use has increased with more physician involvement. It is anticipated that use of maternity services will increase since Shelby Medical Center has a nurse midwife program. The nurse midwives will handle Health Department patients.

The Well Child Clinic is particularly successful in St. Clair County and continues to have good local support. There remains a need for maternity services.

Environmental Health Services in Jefferson County—There were 42 Class A (major) and 27 Class B sources of air pollution subject to regulations by the Air Pollution Control Program. All but three were in compliance at the end of the fiscal year.

All of the 1,169 X-ray machines registered in Jefferson County have been inspected at least once during the last three years. Last year 563 inspections were made.

There were 35 percent more rodent complaints, 14 percent more animal bites and 25 percent more general complaints. The Rabies Control Center which serves Birmingham, the unincorporated areas of Jefferson County and nine other municipalities received 21,827 requests for services. There were 9,612 animals impounded, and 1,520 persons were bitten by animals. Food and milk service made 22,199 inspections.

Environmental Health Services in Central Alabama Public Health Region—Environmental services have been the hardest hit by the current economic conditions. Reduction in new home starts resulted in a decrease in permits for septic tank approval. The state's assumption of the dairy programs also reduced local work loads further. However with the reduction in these activities, inspections of restaurants and other food establishments increased. Also solid waste programs as well as rabies control activities have increased.

Shelby County was first in the region in getting a local bill passed on solid waste. Consequently it can act on complaints more readily than other counties in the region.

Chilton County recently decided to discontinue garbage pickup service. A crisis was averted when a commercial agency agreed to take over these services on a fee system.

PUBLIC HEALTH AREA IV

Administration—Since Public Health Area IV already had a director of nursing and program coordinators for tuberculosis, venereal disease and immunization programs, the addition of a health services administrator, a health educator and an acting environmental supervisor left only the position of area nutrition coordinator unfilled in the area staff as proposed by the assistant state health officer.

With some counties being consolidated into two or three county subunits, each of the eleven counties in the area came under the direction of a health services administrator. It is further planned that a multicounty supervisor for environmental services and a multicounty supervisor for nursing services will oversee their respective activities.

The assistant state health officer has placed a high priority on establishing regular meetings of each county Board of Health. Boards of Health have provided support and direction for public health programs at the county level, and they in turn have received information and updating from the ASHO and administrators. The ASHO attended 34 Board of Health meetings in Public Health Area IV during the fiscal year.

Personal Health Services—The Perinatal Mortality Reduction Program, funded by the Perinatal Advisory Committee, has in no way been a subsidy to local health departments. Rather it has been superimposed on the structure and resources of existing activities within the health departments. This program identifies high risk mothers and babies who are medically indigent and makes possible their close follow-up in the clinics, the physicians' offices and the patients' homes. Home health personnel made 702 home visits to high risk mothers and infants during the year. It is anticipated that more than 1,500 visits will be made during the coming year.

Funds are available for specialized consultations and procedures to the extent that clinic care in the public health setting closely approximates the care that is available in the private sector. Responding to the need for services to those who are medically indigent, the private medical community supports and staffs an increase of sites for maternity care from eight in fiscal year 1981 to 14 sites at the present time. Well child clinics more than trippied—from four to 13.

An important aspect of the Perinatal Mortality Reduction Program involved the expansion of health education by providing funds to employ a health educator in March 1982. The mission of the health educator is to increase community awareness of materal, child health and family planning services in Public Health Area IV. The health educator has explained the health departments' objectives and services to community agencies, professional groups, schools and the general public by means of radio and television announcements, news releases, reports, educational materials, exhibits, and speeches.

Nine counties in PHA IV adopted a fee for service system for home health visits. The two remaining counties are planning similar action early in the coming year. Medicare and Medicaid reimbursement is used when patients are eligible.

The most noteworthy expansion of home health services in the area occurred in May 1982 when the Jacksonville hospital gave the Calhoun County Health Department preferred referral status for home health services which resulted in a doubling of home health visits for Calhoun County. In turn a public health nurse assists with discharge planning. Randolph County has also had an increase in home health care. This success can be attributed to nurses who enjoy the work, rapport with the doctors and discharge planning with the hospitals. Personnel turnover and establishment of private agencies have contributed to the decline of the program in some counties.

The Gadsden City Board of Education contracts with the Etowah County Health Department for two full-time public health nurses during the school year. During school screenings hearing, vision and dental problems are identified. During 1982 these nurses referred 18 students for evaluations of possible scoliosis.

The Etowah County Health Department is the only one in the state with an eye clinic for indigent patients. Local ophthalmologists examined 393 patients in these clinics last year. Eighty-five children were among the 192 patients receiving prescriptions for glasses. Twenty-seven patients were referred for vocational rehabilitation counseling.

Sentinel Operation Surveillance (SOS) has been established and is functioning in all counties of PHA IV. In this immunization program, key institutions and physicians' offices form a network for rapidly reporting the occurrence of vaccine preventable diseases to local health departments. In turn the report is submitted to the area office which summarizes and relays the information to the state level Immunization Program.

The hypertension programs in Chambers and Randolph counties have been hampered by lack of drugs. Consequently emphasis has been placed on education. Public awareness programs, radio and newspaper articles, and scheduled hypertension screenings at health fairs, malls and business sites have been used.

Environmental Health Services—Area and multicounty environmental supervisors play an increasingly important role in food workers' certification courses by qualifying as teachers who are approved by the Division of Inspection in the State Department of Public Health. PHA IV presently has two environmentalists who have been approved as teachers, and three others are completing the training so that they can conduct these courses. Certification courses taught by local environmentalists are expected to relieve state level personnel for other duties while increasing the number of courses offered in each county. It is also anticipated that greater interest and larger attendance will be generated by having the courses taught by local environmentalists who are known to the local food handlers.

Now completely standardized in all counties of PHA IV, each quarterly jail inspection report includes the usual environmentalist report form plus a food service establishment sanitary score sheet if food is prepared on the premises. Both are attached to a narrative summary of deficiencies found and improvements needed and made. The completed report is submitted to the local sheriff or chief of police, and copies are sent to the state level Division of Inspection, the Board of Corrections, the district attorney and the ASHO. The reports are discussed at the County Board of Health meetings, and appropriate follow-up is made by the board.

A standard procedure by which hospitals notify local health departments of animal bites has been implemented in the counties of the area. By making it easier for hospitals to contact public health officials, the number of bites reported has increased greatly.

Especially noteworthy was the success of the DeKalb County Health Department in obtaining an animal control ordinance and an animal pound in Fort Payne. The city hired a full-time animal control officer and implemented the ordinance on February 1, 1982. Consequently the problem of stray cats and dogs in the city has been substantially decreased.

At the area level, counties are urged to utilize door-to-door garbage pickup whenever it is feasible. Cherokee and Coosa counties changed to the preferred garbage pickup, making seven counties in the area which no longer contend with cannisters. Cherokee County closed out at least 34 roadside dumps.

The Calhoun County Health Department sponsors an annual countywide cleanup day which is successful in eliminating litter and garbage and in improving the appearance of the county. Local newspapers, radio stations, sanitation departments and citizens cooperate, support and assist with this project.

Seven aerobic sewage disposal systems were constructed in Etowah County this year. One system was installed in Cherokee County also.

Cherokee County obtained a conviction in a court case involving the illegal installation of a septic tank.

Gadsden has had a severe pigeon problem after an old textile mill was torn down. The pigeons began roosting on nearby schools and houses. Traps were placed in areas where there were large numbers of pigeons.

For the weekend of June 4, 1982, Fort Payne experienced an influx of 32,000 people who came to attend the Alabama June Jam, a charity concert by the musical group Alabama. The smoothness and efficiency with which the DeKalb County Health Department handled sanitation problems and ensured safe food handling earned the department a commendation.

PUBLIC HEALTH AREA V

Most counties in Area V are reporting an increased utilization of Health Department services and many are operating with a smaller staff.

Several counties have initiated special programs or are maintaining services beyond those generally available.

In many counties Maternity Clinic patients are being encouraged to contact physicians and hospitals early for prepayment of delivery costs. In several counties the Health Department staff has become actively involved in promoting these arrangements.

Operation 14 is a program in which school children in the ninth grade (age 14 years) are offered a booster tetanus/diphtheria vaccine for adults (Td) at the school. This program will be offered each year.

During the year the last of the venereal disease clinics outside of Montgomery and Dothan have been discontinued except for three that are attended by physicians. The VD patients are now seen by the general nurse instead of being advised to wait for the clinic. The general nurses work under uniform standing orders signed by local physicians.

Area V still has a disproportionate share of lay midwife deliveries. Two counties successfully prosecuted a lay midwife for practicing with an expired permit. During the year 11 midwives allowed their permits to expire. A visit was made to a lay midwife clinic in Florida to determine that Alabama residents delivering there were not subjected to unusual hazards.

Vital statistics records and availability were standardized for the area in conjunction with the Legal Division and the Bureau of Vital Statistics.

A few of the counties offered flu vaccine and pneumonia vaccine to the general public at a fee to cover the cost. This was done with the concurrence of the county Boards of Health.

Autauga County reports that the first full year of managing the Immunization Program by computer has been very effective. Autauga and Elmore counties both use the computer for completing activity reports (Form A-3) and have reduced the time required in each county from one day to two hours.

An egret roost near an elementary school in Elmore County presented a potential risk of histoplasmosis. The Health Department obtained the cooperation of the landowners and the assistance of the county in clearing the roost before the ground became contaminated.

Coordinated clinics continued to operate in Covington, Butler, Coffee and Geneva counties with efficient utilization of staff time and increased accessibility to services.

In Coffee County a program of fluoride testing of individual wells has been funded for three years by the E. L. Gibson Foundation. Requests for the testing are received from physicians who need to know fluoride levels in order to prescribe for children who are their patients.

Covington and Butler counties operate home health supply closets. They purchase supplies needed in home health care through the state bid system. In addition to saving staff time by having the supplies readily available, they cost about a third of what the health departments had been paying locally. Medicare, Medicaid or the patient is charged only what the supplies cost.

In Covington County locally contributed funds are used to assist low income patients with rabies control activities.

The Dale County Environmental Program has continued its special efforts to upgrade food service establishments. The City of Ozark and Dale County have established an animal control program. Turn over in nursing personnel has been a problem and financial difficulties have hit this county especially hard. Beginning this year nursing supervision has been provided from Crenshaw County.

Lowndes County has survived last year's financial difficulty but has been unable to recruit the additional nursing staff which is needed.

Nursing positions continue to be extremely hard to fill in Macon County. The Veterans Administration Hospital salaries attract nurses who might otherwise apply to the Health Department.

In Montgomery County the new Montgomery County Genetics/Birth Defects Clinic has been meeting bi-monthly. In the Health Department appropriate staff were offered Hepatitis-B vaccine. A computer terminal has been installed for the Immunization Program. Maternity Clinic hours have been increased. The Health Department has begun actively participating in prepay arrangements to ensure hospital delivery for maternity patients. Well Child Clinic hours have been expanded for better service to the public. The Adolescent Clinic has been incorporated into Well Child clinic because of poor attendance when it was a separate clinic. The Lighthouse Teen Clinic closed in June, and the patients were transfered to the Health Department. Immunization levels have improved. Several outbreaks of lice have occurred in the schools. The Sexually Transmitted Disease Clinic has begun performing gram stains. The WIC case load has increased. Vital records were brought up-to-date and are staying current. The Environmental Program has improved with the adoption of better record-keeping procedures in the Inspection Division. The centralization of the milk program resulted in some changes in local staff assignments.

The Russell County Health Department received a 28 percent increase in local funding from the County Commission. The Maternity Clinic was restored after a ten-month interruption. A Well Baby Clinic was initiated in late 1982, and the Medicaid Screening Clinics were expanded. A pamphlet of services was prepare and printed.

PUBLIC HEALTH AREA VI

The Gulf Coast District health officer, the Mobile County health officer, a health officer covering Dallas and Wilcox counties, and six local health service administrators covering seven counties make up the local administration of Public Health Area VI. Although the area includes thirteen county health departments, the population composition dictates the need for more than fourteen satellite clinics to meet the health needs of the rural population.

Personal Health Services—Most of the counties were able to increase utilization of the Home Health Program in 1982. This was accomplished by more aggressive marketing of the program and an increase in the number of services provided by the programs. Baldwin County was able to obtain block grant funds for expansion and saw its case load climb significantly.

After operating from two offices for a number of years, the Maternal and Child Health/Family Planning Program area office was consolidated in Selma in 1982. Coordinated by a team leader, an MCH nurse consultant and a health educator direct their services to support the local health department staffs. The mission of the MCH/FP nurse consultant is to ensure quality nursing care and promote professional development. The health educator promotes community awareness of maternal, child health and family planning services by outreach to public and private community agencies, professional groups, schools, and the general public. This outreach is accomplished by school programs, prenatal educational workshops, exhibits and the news media.

The Regional Perinatal Advisory Committee, working through the local health departments, provided funding for indigent prenatal care in the offices of participating local physicians. Twelve of the thirteen counties were involved in this activity. The program was effective enough that funding was continued for fiscal year 1983.

The Infant Follow-Along Program was successful in providing follow-up on babies discharged from the Neonatal Intensive Care Unit at the University of South Alabama Medical Center. Clinics at which babies received medical attention were conducted quarterly in ten of the thirteen counties. These clinics were staffed by local health department nurses, a neonatologist and a social worker.

The Health Department was an active member of a Genetics Birth Defect Task Force which met quarterly with representatives of other community agencies such as the Department of Pension and Security, the Department of Mental Health, local physicians, local hospital staff nurses, school nurses, and staff members of the Department of Medical Genetics of the University of South Alabama Medical Center. Because of these meetings, medical needs were assessed, documented and coordinated through the local medical societies, resulting in clinics being conducted quarterly in the Monroe County Health Department, a central location in PHA VI. These clinics will be staffed by physicians from the University of South Alabama Medical Center and Health Department employees. Children in the clinics will be evaluated for genetic problems as well as birth defects. Funding will be provided by fees based on a sliding scale.

To enhance the working knowledge of the local health department nursing staffs, the area nurse consultant helped organize and conduct a child health assessment workshop in 1982 which was funded by the Regional Perinatal Advisory Committee. This workshop built upon a more comprehensive workshop offered in 1981.

Within the local health departments, the concept of integrating programs has been emphasized in a blending of the Special Supplemental Food Program for Women, Infants and Children (WIC) and the Well Child Clinic. Although limited in progress, the foundation has been laid for advancement in 1983.

Because of the lower socioeconomic level of the Public Health Area VI population and the logistics of serving sparsely populated counties, great emphasis has been placed upon coordinating with other agencies and programs to maximize the level of medical care.

The Venereal Disease Control Program continues to operate with scheduled clinics in Baldwin, Dallas, Mobile and Wilcox counties. In the more rural counties, patients are either treated by the nurse, working under a doctor's orders, or referred to a local physician for treatment.

In 1980 and 1981 a syphilis epidemic in Mobile and the contiguous counties demanded long hours of attention. However intensive epidemiology helped reduce the morbidity almost 50 percent in 1982. One major concern for 1982 was the unanticipated outbreak of PPNG (penicillinase producing *Neisseria* gonorrhea) in Mobile and sporadic cases in the surrounding counties. However the rapid response by the venereal disease staff, the support and assistance of local health department staffs, and a number of private physicians brought the outbreak under control by the end of 1982.

In 1981 Dallas County had the highest case rate of tuberculosis of any county in the state. Because of this high case rate, Dallas County was selected for a pilot program of intensive follow-up. Each program representative was assigned specific patients to follow, ensuring that the patient received proper medication on a timely basis and saw the physician as scheduled. This program was a major factor in the 50 percent drop in new cases in 1982. This pilot program should serve as a model for other high case rate counties in the future.

The Immunization Program completed a survey of two-year-old children which will provide necessary data to increase the preschool immunization level. The data collected in a school entrance survey will be used to measure compliance with the law requiring proper immunization before school admission.

In addition to the information hospitals receive from the state and other sources, the area representatives visited hospitals in the southern part of PHA VI, promoting an immunization counseling program for children of high risk mothers. The hospitals in the northern part of the area will be visited in the 1983 fiscal year.

Environmental Health Services—The Food Inspection Program continues to be a key concern of the local environmentalists. After a state survey is conducted, the area office, the state office and the local administrators and environmentalists will meet and plan a program for improvement of the local program.

The 1982 recession effectively reduced home building and septic tank inspections by the local environmentalists. Some counties have utilized this time to focus on long-standing sewage disposal systems. Choctaw County, for instance, conducted a survey in two randomly selected areas within the county. This survey revealed that less than 50 percent of the dwellings were in compliance with the state regulations. With the backing of one rural town mayor and Health Department letters to the home owners, roughly 50 percent of the people voluntarily brought their disposal systems into full compliance with the law. Appropriate action is being employed to encourage owners of the remaining substandard dwellings to bring their systems up to approved standards.

Dr. Robert Henderson, the assistant state health officer for PHA IV, has promoted regular meetings of county boards of health and has fostered a closer liaison by meeting with them and keeping them informed of public health activities.

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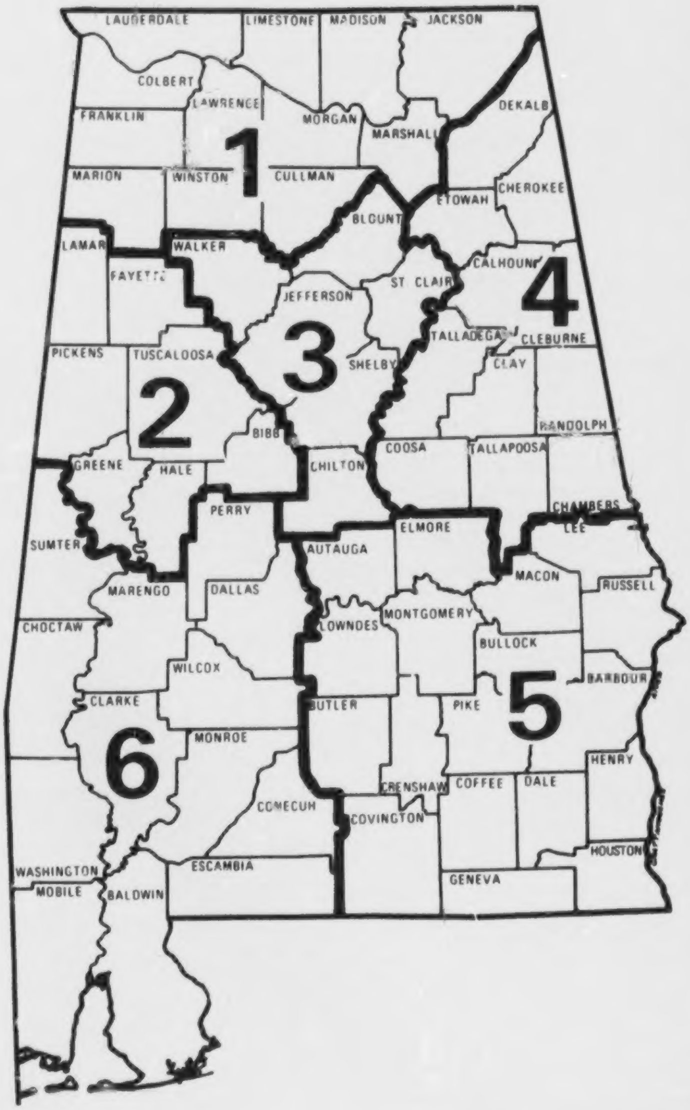
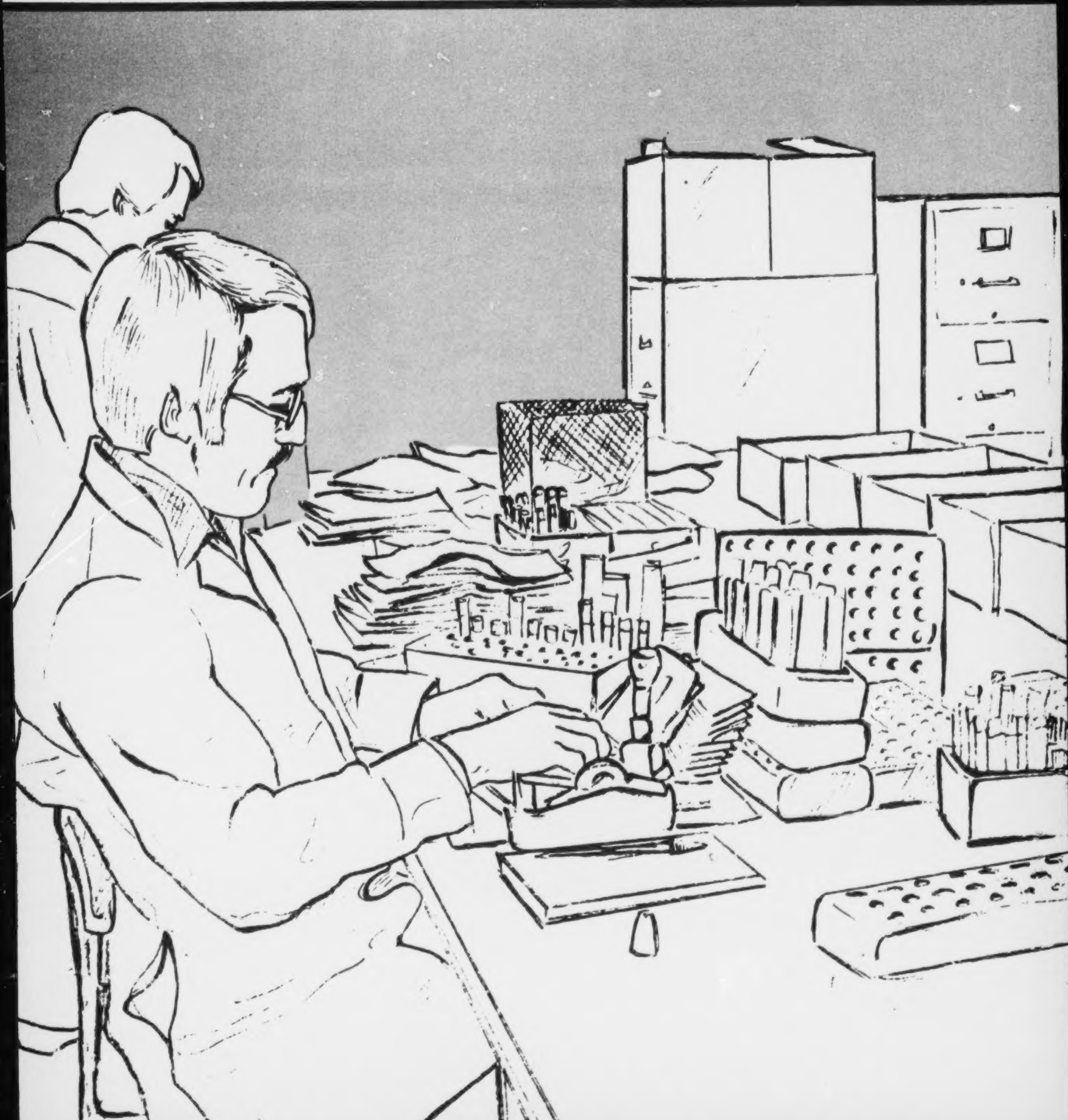


Bureau of Area Health Services



BUREAU OF AREA HEALTH SERVICES

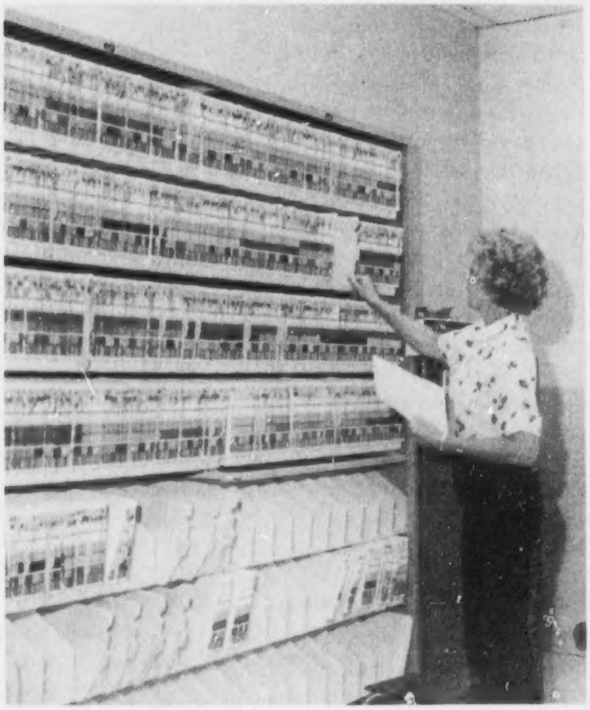
The Bureau of Area Health Services assessed the consulting firm's recommendations for management improvements in the department during 1982. A majority of the recommendations were implemented. A major development was the design and implementation of a program reporting system which sets objectives, quantitative performance targets and accomplishments for all state programs. The system will provide the State Health Officer and the State Committee of Public Health with quarterly management reports, including unit costs.

In concert with the consulting firm's staff, state and local representatives developed a methodology for determining the department's priorities among programs. The State Committee of Public Health approved the program rankings which resulted from applying the methodology. Further refinements in the methodology are scheduled.

The bureau initiated efforts to increase efficiency of service delivery personnel by reducing paperwork. The project was conducted with state and local input and has produced a unified medical record for county health departments, a uniform patient encounter form and the elimination of a considerable volume of forms. At the end of the fiscal year, the new records were scheduled for pilot implementation.

The first year of the Preventive Health and Health Services block grant was completed with the state rather than the federal government making the management decisions on expenditures of the funds. Administered by this bureau, the grant funded eleven projects which included emergency medical services, hypertension services, clinical laboratory services, two rodent control projects, health education services, fluoridation, and home health services. Although the grant funds were reduced by approximately 12 percent from 1981 fiscal year categorical program funding, the reduction did not necessitate reduction of services since three projects had separate funding for a ten-month period during fiscal year 1982. The 1982 grant was $1.3 million which included $50,727 set aside for rape prevention.

The bureau continued to perform management services for the State Health Officer. Examples of these services are preparing department cost-reduction presentations for use by the Governor, recruiting nationally for two key medical positions, maintaining communications with primary care parties, producing the state's contribution to a national public health program reporting system, preparing a crisis relocation plan, and developing an orientation program for State Board of Health members. The bureau also continued working with the assistant state health officers in managing local health services.



By reducing paperwork the new unified medical records which are being implemented in the county health departments will be more efficient.

Public health services across the state survived many challenges during the year, a result of dedicated service delivery and management staffs. Shrinking financial resources and the prospect of further financial losses challenged management to redouble efforts in search of cost-saving measures. More efficient utilization of personnel was the major thrust of cost containment, frequently taking the form of deploying personnel in more than one categorical program. Other measures included tightening controls of in-state travel, altering procedures for accomplishing tasks, and eliminating unnecessary or low-yield tasks. In addition five counties succeeded in obtaining local legislation authorizing collection of fees in the county health department, and state program staffs continued to seek improved reimbursement from third-party payers for personal health services. The assistant state health officers, as the public health area managers, had major responsibilities for maintaining the quality and viability of services, under the direction of the State Health Officer.

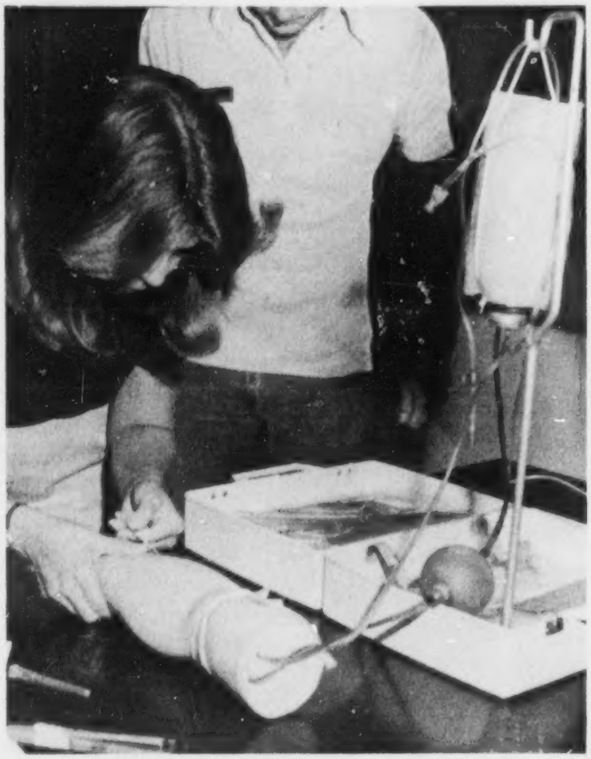
Refugee Health Services—The Alabama Health Program for Refugees completed its second year of operation. The program, funded through a grant-in-aid from the Public Health Service Region IV of the Department of Health and Human Services, reimburses local health departments for providing health care to newly arrived Indochinese refugees.

This year 604 refugees were screened according to protocols established for this group. Immunizations were needed by 50 percent of the refugees, and 43 percent required further follow-up for tuberculosis. Approximately one-third of the refugees needed dental services, and 44 percent required treatment for parasites. Other health problems identified among the refugees include hepatitis B (5 percent), venereal diseases (4 percent), nutritional deficiencies (8 percent), vision and hearing (4 percent) and other health problems (9 percent). One patient was diagnosed with malaria, hepatitis and leprosy. This individual was referred for proper medical care, and epidemiological follow-up was provided.

Screening services were provided in Mobile, Jefferson, Montgomery, Houston and Dallas county health departments. Next year assistance will be available through all local health departments which wish to participate in the program.

Division of Emergency Medical Services

The EMS Division inspects or tests, regulates, and licenses providers of emergency care for patients before they reach the hospital.



Terri Shaw learns how to start intravenous fluids during training for intermediate emergency medical technician.

To determine that emergency medical technicians are qualified to provide the level of pre-hospital care for which they are approved, they must pass the appropriate test. EMS administered standardized written examinations for licensure to 1,965 EMT-basics and 509 EMT-intermediates. The EMT-paramedic examinations are currently administered at the training site.

In 1982 state three-year licenses were issued to 2,967 EMT-basics, 237 EMT-intermediates, 168 EMT-paramedics and 86 other categories.

Recertification requires that EMTs improve their expertise. EMS approved 130 courses for continuing education credit but disapproved two courses. Failure to obtain the required continuing education credits resulted in 200 individual licenses being cancelled. However 1,880 individuals were recertified.

EMS conducted 277 ambulance vehicle inspections. All of the 120 regular annual ambulance service operators were issued regular annual licenses. There were no provisional licenses in 1982.

Authorization to handle and use approved medications and intravenous fluids in the pre-hospital environment were issued to 172 advanced life support (ALS) providers. Sixty-three hospital pharmacies received authorizations to supply IV fluids and medications to ALS providers.

EMS staff provided support for four meetings of the State EMS Advisory Board. The highlight of these meetings was the upgrading of the State EMS Rules.

The revised rules require that regional EMS systems adopt medical control and accountability plans. The authority of EMTs to perform invasive procedures was linked to and qualified by adherence to the regional medical control and accountability plan. The new rules provide for the appointment of physician advisors for all licensed ambulance services and ALS nontransport services and for the credentialing of advanced life support EMT personnel.

The Committee of Public Health approved the division's draft of a legislative bill to regulate air ambulances.

Regional agencies submitted appropriate segments of the fiscal year 1984 statewide EMS plan.

Utilizing the competitive bid procedure, EMS procured and distributed 163 trauma kits. The regional agencies issue them to first responders.

Twenty-six radiotelephone switching stations (R.T.S.S.) were installed. There are currently 63 R.T.S.S. base stations in 50 Alabama counties. Units for eight more counties have been ordered. R.T.S.S. provide UHF radiotelephone telemetry linkage between field EMTs and medical direction.

An EMS medical consultation panel composed of the medical directors of the six regions was formed. This panel, serving under contract, provided medical advice directly to the EMS Division, drafted the state medical control and accountability plan, and worked extensively on the EMS rules amendments.

TABLE 3-1
COUNTY HEALTH DEPARTMENT ACTIVITIES
1982

1982 ACTIVITIES	VITAL STATISTICS	IMMUNIZATION	WELL CHILD MEDICAL CLINICS	WELL CHILD SCREENING CLINICS	WIC	HEALTH EDUCATION	SCHOOL HEALTH	DENTAL CARE	DENTAL HEALTH EDUCATION	FLUORIDE MOUTH RINSE	MATERNITY MEDICAL CARE	MATERNITY NURSING CARE	FAMILY PLANNING	TUBERCULOSIS	VENEREAL DISEASE	HYPERTENSION	BLOOD PRESSURE SCREENING	CANCER DETECTION	HOME HEALTH CARE	FOOD AND WATER INSPECTION	MILK INSPECTION	SOLID WASTE COLLECTION	VECTOR CONTROL	SEWAGE DISPOSAL INSPECTION	SUBDIVISION REVIEW	SWIMMING POOL INSPECTION	JAIL INSPECTION	RABIES CONTROL	CHILD CARE FACILITY INSPECTION	EPIDEMIOLOGY SURVEILLANCE	REFUGEE SCREENING	OTHER PROGRAMS
PUBLIC HEALTH AREA I																																
NORTHWEST ALABAMA REGIONAL HEALTH DEPARTMENT																																
COLBERT	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	X	X	X	X	X		X
FRANKLIN	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	X	X	X	X	X		X
LAUDERDALE	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	X	X	X	X	X		X
TRI-COUNTY DISTRICT HEALTH SERVICES																																
CULLMAN	X	X	X	X	X						X	X	X	X	X				X	X		X	X	X	X	X	X	X	X	X		
LAWRENCE	X	X	X	X	X								X	X	X				X	X			X	X	X	X	X	X	X	X		
LIMESTONE	X	X	X	X	X						X	X	X	X	X				X	X		X	X	X	X	X	X	X	X	X		
MORGAN	X	X	X	X	X		X				X	X	X	X	X				X	X		X	X	X	X	X	X	X	X	X		
JACKSON	X	X	X	X	X	X					X	X	X	X	X			X	X	X		X	X	X	X	X	X	X	X	X		
MADISON	X	X		X	X	X	X		X		X	X	X	X	X		X		X	X		X	X	X	X	X	X	X	X	X	X	X
MARION	X	X			X	X	X			X			X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X		
MARSHALL	X	X	X	X	X	X							X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X		
WINSTON	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		
PUBLIC HEALTH AREA II																																
WEST ALABAMA DISTRICT HEALTH DEPARTMENT																																
BIBB	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	
GREENE	X	X	X	X	X	X	X				X	X	X	X	X	X	X		X	X		X	X	X	X		X	X	X	X	X	
LAMAR	X	X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	X	
PICKENS	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X	X		X	X	X	X		X	X	X	X	X	
TUSCALOOSA	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X	X	X	X	X	X	X	X	
FAYETTE	X	X	X	X	X	X	X		X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X		
HALE	X	X	X	X	X	X	X			X			X	X	X		X	X	X	X		X	X	X	X		X	X	X	X		
PUBLIC HEALTH AREA III																																
BLOUNT	X	X			X	X				X	X	X	X	X	X		X	X	X	X				X	X		X	X	X	X		X
CHILTON	X	X	X	X	X	X	X		X		X	X	X	X	X		X	X	X	X		X	X	X	X		X	X	X	X		X
JEFFERSON	X	X	X	X	X	X		X	X	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X
ST. CLAIR	X	X	X	X	X	X	X		X				X	X			X	X	X	X		X		X	X		X	X	X	X		
SHELBY	X	X	X	X	X	X	X		X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X		
WALKER	X	X		X	X	X	X					X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X
PUBLIC HEALTH AREA IV																																
CALHOUN	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X		X	X		X	X	X	X		X	X	X	X		
CHAMBERS	X	X		X	X	X			X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		
CHEROKEE	X	X		X	X					X		X	X	X	X		X	X	X	X		X	X	X	X	X	X	X				X
CLAY	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X			X	X	X		X	X	X	X		
CLEBURNE	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X		
COOSA	X	X	X	X	X	X				X	X	X	X	X	X		X	X	X	X		X	X	X	X		X	X	X	X		
DEKALB	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X
ETOWAH	X	X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X			X	X	X		X	X	X	X		X
RANDOLPH	X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X			X	X	X		X	X	X	X		
TALLADEGA	X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		
TALLAPOOSA	X	X	X		X							X	X	X	X		X	X	X	X				X	X		X	X	X	X		
PUBLIC HEALTH AREA V																																
AUTAUGA	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X		X	X	X	X	X	X	X	X	X		
BARBOUR	X	X		X	X	X					X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		
BULLOCK	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X	X	X	X	X	X	X		
BUTLER	X	X		X	X	X	X			X		X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	X		X
COFFEE	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		
COVINGTON	X	X		X	X	X	X			X			X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X
CRENSHAW	X	X	X	X	X	X	X			X			X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X		
DALE	X	X		X	X	X			X				X	X	X		X	X	X	X			X	X	X		X	X	X	X		
ELMORE	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X		X	X	X	X	X	X	X	X	X		
GENEVA	X	X	X	X	X	X	X						X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		
HENRY	X	X		X	X	X					X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		
HOUSTON	X	X	X	X	X	X	X		X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	X	X
LEE	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	X	
LOWNDES	X	X		X		X			X	X	X	X	X	X	X		X	X	X	X			X	X	X		X	X	X	X		X
MACON	X	X	X	X	X	X		X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X		
MONTGOMERY	X	X	X	X	X	X	X				X	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	X	
PIKE	X	X		X	X	X	X		X	X			X	X	X		X		X	X		X	X	X	X	X	X	X	X	X		
RUSSELL	X	X	X	X	X	X					X	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X		
PUBLIC HEALTH AREA VI																																
GULF COAST DISTRICT HEALTH DEPARTMENT																																
BALDWIN	X	X		X	X	X					X	X	X	X	X		X	X	X	X		X	X	X	X		X	X	X	X		
CONECUH	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		
ESCAMBIA	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		
CHOCTAW	X	X	X	X	X	X				X	X	X	X	X		X	X	X	X	X		X	X	X	X		X	X	X	X		
CLARKE	X	X	X	X	X	X	X					X	X	X	X	X		X	X	X		X	X	X	X		X	X	X	X		
DALLAS	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	
MARENGO	X	X		X	X	X	X		X			X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	X		
MOBILE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X		X	X	X	X	X	X	X	X	X	X
MONROE	X	X	X	X	X	X			X	X	X	X	X	X	X		X	X	X	X			X	X	X		X	X	X	X		X
PERRY	X	X		X	X	X				X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X		
SUMTER	X	X		X	X	X	X					X	X	X			X	X	X	X				X	X		X	X	X	X		
WASHINGTON	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X		
WILCOX	X	X		X	X	X						X	X	X	X			X	X	X		X	X		X		X	X		X		

ALABAMA COUNTY DEPARTMENTS OF PUBLIC HEALTH
ASSISTANT STATE HEALTH OFFICERS, LOCAL HEALTH OFFICERS & HEALTH SERVICES ADMINISTRATORS

April 1, 1983

County District	Name	Title	Tel No	Mailing Address
PUBLIC HEALTH AREA # 1				
	Betty W Vaughan M D	ASHO	353 7021	Box 1628 Decatur 35602
NORTHWEST AL REGIONAL HEALTH DEPT			383 1231	Box 929 Tuscumbia 35674
Colbert	Karen Landers, M D	DHO	383 1231	Box 929 Tuscumbia 35674
Franklin	Karen Landers M D	DHO	332 2700	Box 100 Russellville 35653
Lauderdale	Karen Landers M D	DHO	764 7453	Box 1036 Florence 35630
TRI COUNTY DIST HEALTH SERVICES			353 7021	Box 1628 Decatur 35602
Cullman	Betty W Vaughan M D	DHO	739 3530	305 N 4th Ave N E Cullman 35055
Lawrence	Betty W Vaughan M D	DHO	974 1141	Box 308 Moulton 35650
Limestone	Betty W Vaughan M D	DHO	232 3200	310 W Elm St Athens 35611
Morgan	Betty W Vaughan M D	DHO	353 7021	Box 1628 Decatur 35602
Jackson	Lyle Haas	HSA	259 4161	Box 398 Scottsboro 35768
Madison	Lawrence L Robey M D	LHO	539 3711	Box 425 Huntsville 35804
Marion			921 3118	Box 158 Hamilton 35570
Marshall	Lyle Haas	HSA	582 3174	275 Gunter Ave Guntersville 35976
Winston			489 5396	Box 57 Double Springs 35553
PUBLIC HEALTH AREA # 2				
	E Kenneth Aycock M D	ASHO	345 4131	1101 Jackson Ave Tuscaloosa 35401
WEST AL DISTRICT HEALTH DEPT			345 4131	1101 Jackson Ave Tuscaloosa 35401
Bibb	E Kenneth Aycock M D	DHO	926 9702	105 Church St Centreville 35042
Greene	E Kenneth Aycock M D	DHO	372 9361	Box 269 Eutaw 35462
Lamar	E Kenneth Aycock M D	DHO	695 9195	Box 548 Vernon 35592
Pickens	E Kenneth Aycock M D	DHO	367 8157	Rt 2 Box 202 Carrollton 35447
Tuscaloosa	E Kenneth Aycock M D	DHO	345 4131	1101 Jackson Ave Tuscaloosa 35401
Fayette	John Toppins	HSA	932 5260	Box 351 Fayette 35555
Hale	J P Chism Ed D	HSA	624 3018	Box 87 Greensboro 36744
PUBLIC HEALTH AREA # 3				
	Mary J Tiller M D Acting	ASHO	933 9110	Box 2646 Birmingham 35202
Blount	Mary Ann Pass M D	LHO	274 2120	Box 96 Oneonta 35121
Chilton	Mary Ann Pass M D	LHO	755 1287	Box 147 Clanton 35045
Jefferson	Mary J Tiller M D Acting	LHO	933 9110	Box 2646 Birmingham 35202
St Clair	Mary Ann Pass M D	LHO	594 3171	Box 249 Ashville 35953
St Clair	Mary Ann Pass M D	LHO	338 3357	Box 627 Pell City 35125
Shelby	Mary Ann Pass M D	LHO	669 3117	Box 976 Columbiana 35051
Walker	Mary Ann Pass M D	LHO	221 9775	Box 690 Jasper 35501
PUBLIC HEALTH AREA # 4				
	Robert J Henderson M D	ASHO	236 3274	Box 488 Anniston 36202
Calhoun	John Screws	HSA	237 7523	Box 488 Anniston 36202
Chambers	Ellene Mitchell	HSA	864 8834	Box 319 LaFayette 36862
Cherokee	Jim C Russell	HSA	927 3132	Box 176 Centre 35960
Clay	Perry Bryant	HSA	354 2181	Box 325 Ashland 36251
Cleburne	John Screws	HSA	463 2296	Box 36 Heflin 36264
Coosa	Perry Bryant	HSA	377 2244	Box 235 Rockford 35136
DeKalb	Jim C Russell	HSA	845 1931	Box 347 Fort Payne 35967
Etowah	Jean Foster	HSA	547 6311	Box 555 Gadsden 35902
Randolph	Ellene Mitchell	HSA	863 8981	527 Price St Roanoke 36274
Talladega	Perry Bryant	HSA	362 2593	Box 1012 Talladega 35160
Tallapoosa	Ellene Mitchell	HSA	825 9203	Box 125 Dadeville 36853
PUBLIC HEALTH AREA # 5				
	Joyce Gendzwill M D	ASHO	832 3376	State Office Bldg Room 900 Montgomery 36130
Autauga	Bobby H Bryan	HSA	365 3349	Box G Prattville 36067
Barbour	Russell Kilingsworth	HSA	775 8324	Box 217 Clayton 36016
Bullock	Ron Wheeler	HSA	738 3030	Drawer 430 Union Springs 36089
Butler	Ziba Anderson	HSA	382 3154	Box 339 Greenville 36037
Coffee	Kenneth Ball	HSA	897 2523	Box 280 Elba 36323
Coffee	Kenneth Ball	HSA	347 9574	Box 1316 Enterprise 36330
Covington	Ziba Anderson	HSA	222 1175	Box 186 Andalusia 36420
Crenshaw	Ron Wheeler	HSA	335 3401	Box 326 Luverne 36049
Dale	Charles Oliver	HSA	774 5146	Box 397 Ozark 36360
Elmore	Bobby H Bryan	HSA	567 5171	Box 316 Wetumpka 36092
Geneva	Kenneth Ball	HSA	684 2257	Box 386 Geneva 36340
Henry	Russell Killingsworth	HSA	585 2660	Box 86 Abbeville 36310
Houston	Marilyn E Crumpton M D	LHO	793 6404	Drawer 2087 Dothan 36302
Lee	Ron Wheeler	HSA	745 5765	Box 2207 Opelika 36801
Lowndes	Virginia Little	HSA	548 2161	Box 35 Hayneville 36040
Macon	Walter Pack	HSA	727 1800	Box 27 Tuskegee 36083
Montgomery	Mary G Dorrough M D	LHO	263 6671	Box 4008 Montgomery 36195
Pike	Ron Wheeler	HSA	566 2860	Box 425 Troy 36081
Russell	Walter Pack	HSA	297 0251	Box 548 Phenix City 36867
PUBLIC HEALTH AREA # 6				
	VACANT	ASHO		
	Tom N Phillips	HSA	832-3186	State Office Bldg Room 307 Montgomery 36130
GULF COAST DISTRICT HEALTH DEPT			937-9561	Box 150 Bay Minette 36507
Baldwin	C P St Amant Jr , M D	DHO	937-9561	Box 150 Bay Minette 36507
Conecuh	C P St Amant Jr M D	DHO	578-1952	526 Bellville St Evergreen 36401
Escambia	C P St Amant Jr , M D	DHO	867-5765	Box 66 Brewton 36426
Choctaw	Richard Jayne	HSA	459-2494	315 E Pushmataha St Butler 36904
Clarke	Bill Coleman	HSA	275-3772	Box 477 Grove Hill 36451
Dallas	S D Waldrop, M D	LHO	875-4401	Box K Selma 36701
Marengo	Charles Shields	HSA	295-4205	Box 454 Linden 36748
Mobile	Alfred R Stumpe, M D	LHO	690-8101	Box 2867 Mobile 36652
Monroe	Virginia Little	HSA	575-3109	Box 609 Monroeville 36460
Perry	J P Chism, Ed D	HSA	683-6153	Box 119 Marion 36756
Sumter	Thomas C Stuart	HSA	652-7972	Drawer 340 Livingston 35470
Washington	Bill Coleman	HSA	847-2245	Box 417 Chatom 36518
Wilcox	S D Waldrop, M D	LHO	682-4515	Box 27 Camden 36726

Clinical Laboratory Administration

CLINICAL LABORATORY ADMINISTRATION

The Clinical Laboratory Administration (CLA) continues to be ranked among the top four public health laboratories in the United States in the number of examinations performed. This is a significant achievement considering the decrease in funding and personnel during fiscal year 1982.

A significant increase in the number of positive cases of several diseases important in public health was noted during 1982. The indirect immunofluorescence test (IFA) was performed on 459 serum specimens (306 percent increase over the previous year) for the detection of antibodies to *Legionella pneumophila*. Titers of at least or greater than 256, which indicate infection at an undetermined time, were found in 21 specimens (200 percent increase over fiscal year 1981), and paired serums from four patients demonstrated evidence of a recent infection (100 percent increase over 1981). Diagnostic precipitin bands were detected in 69 histoplasmosis specimens and 57 blastomycosis serums which represent increases over the previous year of 35.5 percent and 46.2 percent respectively. Rabies, particularly in the raccoon, continued to be a major concern in the state. The central and branch laboratories processed 3,295 rabies specimens (28 percent increase over fiscal year 1981) and found 172 positives (87 percent increase over the previous year).

The work load reporting system developed by the laboratory in cooperation with the Centers for Disease Control (CDC) has been functional since 1979. It has proven to be an excellent management tool to track cost and set manpower needs. In recognition of the CLA's leadership in this field, specifically in the development of work time units (WTU), the CDC invited the CLA to co-host a regional work load measurement workshop. The workshop will be held in the central laboratory some time late in the second quarter of fiscal year 1983.

Administrative Support Services

Purchasing—The purchasing office processed all requisitions from the central and branch laboratories, ordered and distributed supplies and equipment required for operation, and maintained inventory records.

Animal House—In the animal house, animal brains were removed for rabies examination and mice were bred for use in laboratory tests.

Stockroom—The personnel of the stockroom worked in conjunction with both the purchasing and packing sections to fill, pack and supply orders for state, county and local health departments as well as private physicians.

Supporting services of the administrative support section included mail pick-up and delivery, building maintenance, and janitorial services.

Personnel—One Microbiologist III, one Account Clerk II, one Account Clerk I, one Clerk Stenographer II, one Stock Clerk II, one Stock Clerk I, one Laboratory Technician I, one Laboratory Aide II, two Heating and Air Conditioning Technician II's, and six laborers are assigned to this unit of the laboratory.

Bacteriology Division

General Bacteriology—This section served as a reference laboratory for private and hospital laboratories statewide in the identification of bacterial cultures. The following organisms were reported in 1982.

Organisms	Number of Isolates
Achromobacter xylosoxidans	1
Acinetobacter calcoaceticus var. *anitratus*	9
Acinetobacter calcoaceticus var. *lwoffi*	18
Actinobacillus actinomycetemcomitans	5
Actinomyces naeslundii	1
Actinomyces viscosus	1
Aerococcus species	2
Aeromonas species	2
Aeromonas hydrophila	5
Alcaligenes faecalis	1
Alcaligenes odorans	1
Bacillus species	27
Bacillus species—H_2S + biotype 1	1
Bacillus cereus	2
Bacillus circulans	1
Bacillus laterosporus	1
Bacillus pumilus	1
Bacillus subtilis	1
Bacteroides species	7
Bacteroides distasonis	1
Bacteroides fragilis	3
Bacteroides thetaiotaomicron	3
Bifidobacterium species	1
Bifidobacterium breve	1
Bordetella bronchiseptica	2
Branhamella catarrhalis	5
Brucella suis	2
Campylobacter species (NARTC) (Nalixidic Acid Resistant Thermophilic *Campylobacter*)	2
Campylobacter jejuni	20
Campylobacter sputorum	1
Cardiobacterium hominis	2
Citrobacter diversus	1
Clostridium species	4
Clostridium bifermentans	1
Clostridium difficile	1
Clostridium perfringens	13
Clostridium ramosum	2
Clostridium septicum	2
Clostridium tertium	3

Corynebacterium species	26
Corynebacterium aquaticum	1
Corynebacterium Group E	5
Corynebacterium Group G-1	1
Corynebacterium Group J-K	3
Edwardsiella tarda	1
Eikenella corrodens	11
Enterobacter aerogenes	1
Enterobacter agglomerans	13
Enterobacter cloacae	4
Escherichia coli	11
Eubacterium species	2
Eubacterium lentum	1
Flavobacterium species	1
Flavobacterium species—Group II-B	4
Flavobacterium meningosepticum	1
Flavobacterium multivorum	3
Fusobacterium species	1
Fusobacterium gonidiaformans	1
Fusobacterium necrophorum	2
Fusobacterium nucleatum	1
Gardnerella vaginalis	19
Haemophilus aphrophilus	2
Haemophilus influenzae—unable to type	11
Haemophilus influenzae—Type B	10
Haemophilus influenzae—Type C	2
Haemophilus influenzae—Type E	2
Haemophilus influenzae—Type F	2
Haemophilus parahaemolyticus	1
Haemophilus parainfluenzae	8
Haemophilus paraphrophilus	6
Hafnia alvei	1
HB-5	2
Klebsiella pneumoniae	3
Lactobacillus species	12
Lactobacillus casei—ssp. *rhamnosus*	2
Lactobacillus catenaforme	2
Lactobacillus plantarum	1
Listeria monocytogenes	5
Listeria monocytogenes 1b	1
M-5	1
M-6	1
Micrococcus species	1
Moraxella species	5
Moraxella nonliquefaciens	2
Moraxella osloensis	3
Morganella morganii	3
Neisseria gonorrhoeae	135
Neisseria meningitidis (unable to type)	10
Neisseria meningitidis—Group B	7
Neisseria meningitidis—Group C	6
Neisseria meningitidis—Slaterus Y	3
Neisseria meningitidis—Slaterus Z'	1
Neisseria meningitidis— W135	3
Neisseria sicca	2
Neisseria subflava	3
Pasteurella multocida	11
Pasteurella ureae	1
Peptococcus species	1
Peptococcus prevotii	3
Peptostreptococcus species	2
Peptostreptococcus anaerobius	3
Peptostreptococcus intermedius	1
Propionibacterium species	6
Propionibacterium acnes	2
Propionibacterium granulosum	1
Providencia rettgeri	2
Pseudomonas species	11
Pseudomonas species—CDC Group 1	1
Pseudomonas aeruginosa	11
Pseudomonas alcaligenes	1
Pseudomonas cepacia	2
Pseudomonas fluorescens	1
Pseudomonas maltophilia	6
Pseudomonas mesophilica	1
Pseudomonas paucimobilis	1
Pseudomonas pseudoalcaligenes	1
Pseudomonas putida	3
Pseudomonas stutzeri	3
Pseudomonas testosteroni	1
Sarcina	6
Serratia liquefaciens	2
Staphylococcus—coagulase positive	3
Staphylococcus—coagulase negative	8
Streptococcus species	1
Streptococcus—Group A	1
Streptococcus—Group B	3
Streptococcus—Group C	1
Streptococcus—Group D (Enterococcus)	1
Streptococcus—Group F	1
Streptococcus—Group G	3
Streptococcus acidominimus	1
Streptococcus anginosus-constellatus	1
Streptococcus mitis	7
Streptococcus MG—*intermedius*	9
Streptococcus morbillorium	2
Streptococcus pneumoniae	3
Streptococcus sanguis I	1
Streptococcus sanguis II	4
Streptococcus uberis	2
Veillonella alcalescens	1
Vibrio cholerae—Smith Type 27	1
Vibrio vulnificus	3
Yersinia enterocolitica	2
IV-C (2)	1
IV-e	1
VE-1	1
VE-2	2
Unable to identify	1
Serums—*Clostridium botulinum* toxicity	1

The general bacteriology section also cultured a variety of clinical specimens for staphylococci, diphtheria bacilli, *Bordetella pertussis*—the causative agent of whooping cough—and Legionnaire's disease bacterium. Of these, three *B. pertussis* were isolated by culture, two were reported by direct fluorescent antibody (FA) procedures, and one *Legionella pneumophila* was identified by culture and FA.

Enteric Bacteriology—The 1,925 stool specimens submitted through county health departments and the 569 cultures referred by private and hospital laboratories for serotyping represent a 31 percent increase in clinical specimens and a 14 percent increase in total specimens over fiscal year 1981. The 744 Salmonellas and 63 Shigellas identified and serotyped were as follows:

Salmonella enteritidis serotype

Agona	15
Alachua	1
Anatum	9
Bareilly	21
Berta	2
Blockley	4
Bonariensis	2
Braenderup	8
Brandenburg	5
Bredeney	4
Cairo	1
California	1
Cerro	1
Chester	4
Derby	6
Drypool	2
Dusseldorf	1
Enteritidis	8
Halmstad	2
Hartford	1
Heidelberg	51
Indiana	12
Infantis	39
Inverness	4
Irumu	10
Java	11
Javiana	16
Johannesburg	1
Kentucky	1
Litchfield	7
London	1
Manchester	1
Manhattan	2
Mbandaka	5
Memphis	1
Miami	7
Mississippi (atlanta)	12
Missouri	1
Montevideo	10
Muenchen	35
Muenster	15
New Brunswick	4
Newhaw	1
Newport	31
Norwich	1
Ohio	1
Oranienburg	23
Panama	1
Pensacola	2
Poona	1
Rubislaw	1
Saint Paul	4
Schwarzengrund	16
Siegburg	2
Thompson	8
Tshiongwe	1
Typhimurium	256
Var. Copenhagen	14
Victoria	1
Weltevreden	1
Worthington	2
Salmonella cholerae-suis	1
Salmonella cholerae-suis bioser. Kunzendorf	1
Salmonella typhi	29
Salmonella sp	2
Shigella sonnei	46
Shigella flexneri—Type I	3
Shigella flexneri—Type II	5
Shigella flexneri—Type III	1
Shigella flexneri—variant	8

Rabies—The central laboratory received 1,321 animal brains for rabies examination during fiscal year 1982. Ninety-nine of the animals were found to be positive by fluorescent antibody procedures. A 41 percent increase in total specimens and a 120 percent increase in positives over last year were recorded. The following species of animals were reported as positive for rabies.

Dogs	1
Cats	4
Bats	26
Raccoons	64
Cows	1
Skunks	2
Foxes	1
TOTAL	99

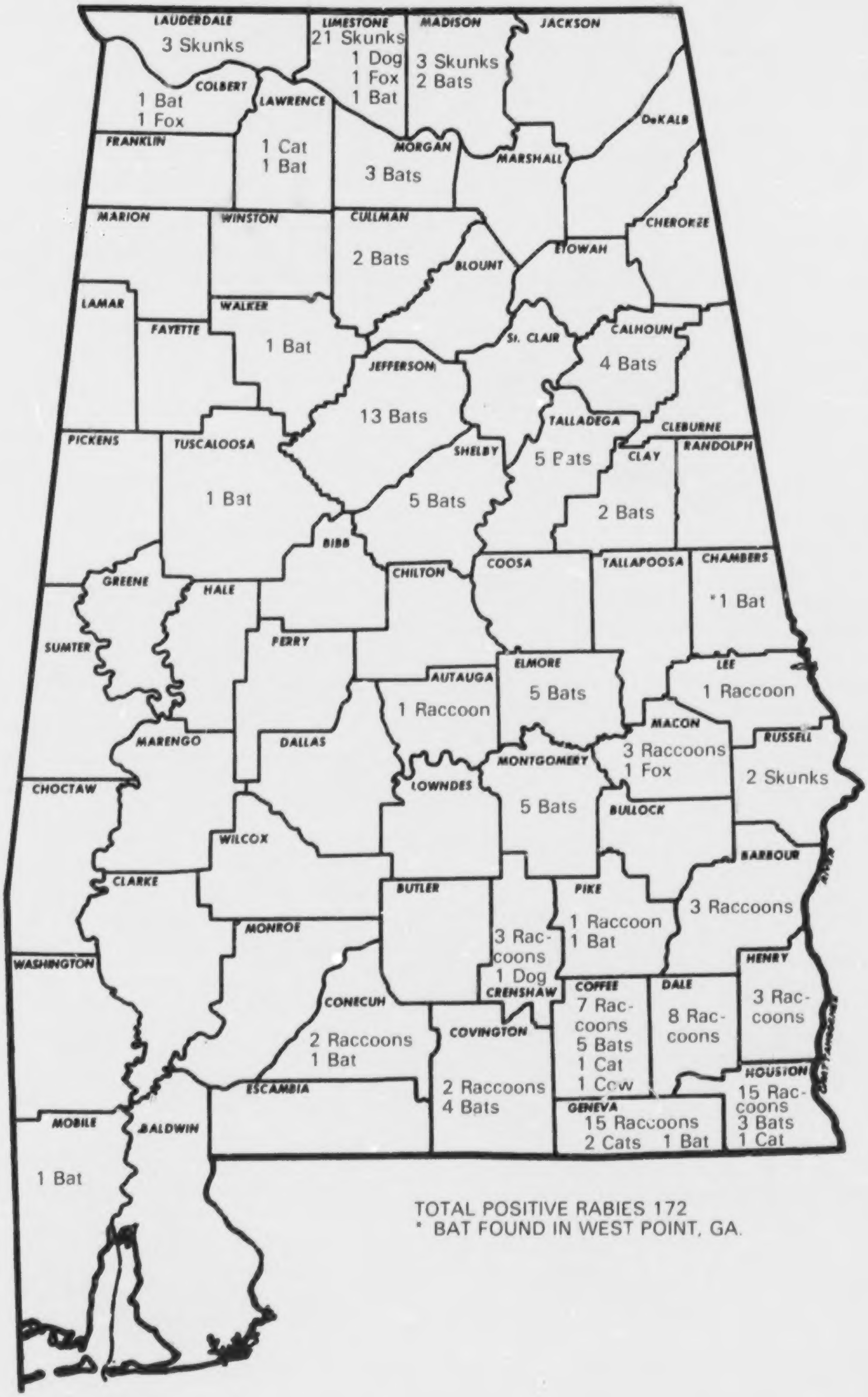
This section also prepared the rabies infected and normal mouse brain suspensions used in rabies testing at the central and branch laboratories. Table 4-1 and Chart 4-1 give additional details.

TABLE 4-1
FY-82
POSITIVE RABIES IN ALABAMA

Entire State	October	November	December	January	February	March	April	May	June	July	August	September	TOTAL
Autauga									1 Raccoon				1
Baldwin													
Barbour	1 Raccoon	1 Raccoon								1 Raccoon			3
Bibb													
Blount													
Bullock													
Butler													
Calhoun	1 Bat									2 Bats	1 Bat		4
Chambers											*1 Bat		1
Cherokee													
Chilton													
Choctaw													
Clarke													
Clay											1 Bat	1 Bat	2
Cleburne													
Coffee	1 Raccoon	1 Raccoon		1 Raccoon	1 Raccoon			1 Raccoon		1 Cat 2 Bats	2 Bats	2 Raccoons 1 Bat 1 Cow	14
Colbert				1 Fox								1 Bat	2
Conecuh		1 Raccoon					1 Raccoon				1 Bat		3
Coosa													
Covington						1 Bat	1 Raccoon	1 Bat		1 Bat	1 Bat	1 Raccoon	6
Crenshaw						1 Raccoon			1 Dog 1 Raccoon		1 Raccoon		4
Cullman											1 Bat	1 Bat	2
Dale	1 Raccoon		2 Raccoons		1 Raccoon	1 Raccoon	1 Raccoon				2 Raccoons		8
Dallas													
DeKalb													
Elmore									2 Bats	1 Bat	2 Bats		5
Escambia													
Etowah													
Fayette													
Franklin													
Geneva	4 Raccoons	1 Raccoon	1 Cat 2 Raccoons	3 Raccoons	1 Raccoon	1 Cat		2 Raccoons			1 Bat	2 Raccoons	18
Greene													
Hale													
Henry			1 Raccoon	1 Raccoon	1 Raccoon								3
Houston	2 Raccoons	1 Bat	5 Raccoons			1 Raccoon	2 Raccoons	3 Raccoons			1 Cat 1 Bat	1 Bat 2 Raccoons	19
Jackson													
Jefferson	2 Bats		1 Bat			1 Bat	1 Bat	1 Bat	1 Bat	3 Bats	2 Bats	1 Bat	13
Lamar													
Lauderdale	1 Skunk						2 Skunks						3
Lawrence		1 Cat										1 Bat	2
Lee								1 Raccoon					1
Limestone	1 Dog 4 Skunks	1 Skunk	1 Skunk		1 Skunk	2 Skunks	1 Skunk	2 Skunks	5 Skunks	1 Fox 2 Skunks	1 Bat 1 Skunk	1 Skunk	24
Lowndes													
Macon	1 Raccoon				1 Raccoon						1 Fox 1 Raccoon		4
Madison		1 Skunk							1 Skunk		1 Bat 1 Skunk	1 Bat	5
Marengo													
Marion													
Marshall													
Mobile							1 Bat						1
Monroe													
Montgomery										3 Bats	1 Bat	1 Bat	5
Morgan								1 Bat			1 Bat	1 Bat	3
Perry													
Pickens													
Pike										1 Raccoon	1 Bat		2
Randolph													
Russell		1 Skunk	1 Skunk										2
St. Clair													
Shelby		1 Bat				1 Bat	1 Bat				1 Bat	1 Bat	5
Sumter													
Talladega											4 Bats	1 Bat	5
Tallapoosa													
Tuscaloosa								1 Bat					1
Walker										1 Bat			1
Washington													
Wilcox													
Winston													
TOTAL	19	10	14	6	6	9	11	13	12	19	32	21	172

*Found in West Point, Georgia

CHART 4-1
POSITIVE RABIES
October 1, 1981-September 30, 1982



TOTAL POSITIVE RABIES 172
* BAT FOUND IN WEST POINT, GA.

Neisseria gonorrhoeae—The central laboratory screened 67,044 cultures for the presence of *Neisseria gonorrhoeae* and found 5,490 (8.1 percent) to be positive. All positives were screened for beta lactamase production and 61 penicillin resistant cultures were detected.

Parasitology—From the 12,761 specimens examined for parasitic infection this year, 1,883 positives were reported, a decrease of 9 percent in total specimens but an increase of almost 3 percent in positives over fiscal year 1981. The following intestinal parasites were identified.

Hookworm	288
Ascaris lumbricoides	185
Enterobius vermicularis (Pinworm)	135
Trichuris trichiura	109
Strongyloides stercoralis	73
Hymenolepis nana	40
Clonorchis sinensis	37
Entamoeba coli	442
Endolimax nana	413
Giardia lamblia	641
Entamoeba hartmanni	101
Entamoeba histolytica	41
Chilomastix mesnili	9
Iodamoeba butschlii	37
TOTAL	2,551

In additon three blood smears were found to be positive for *Plasmodium vivax* (malaria).

Sanitary Bacteriology—Food Bacteriology—The presence of bacteria associated with food borne illness was detected in 13 of the 200 samples submitted for examination.

Organism	Food
Staphylococcus-coagulase positive	turkey (3), candied potatoes (2), cranberry sauce (1), dressing (3), peach (1), peas and carrots (1)
Bacillus cereus	hash brown potatoes (1)
Clostridium perfringens	sliced pineapple (1)

Water Bacteriology—Some 17,611 water samples received from public and private supplies were tested for bacterial contamination and residual chlorine. A coliform count of over four per 100 ml, indicating possible contamination, was reported on 7 percent of these samples.

Dairy Bacteriology—Some 4,900 milk and dairy products were examined this year in accordance with procedures outlined in the 14th edition of *Standard Methods for the Examination of Dairy Products*. Beta-lactams were found in 15 of these products, and 1,065 failed to meet one or more of the criteria of acceptability.

Other Activities—All sections in the Bacteriology Division participated in proficiency testing programs. CDC provided check samples to general and enteric bacteriology and to parasitology. The GC section served as a reference laboratory for CDC and the Tennessee State Health Department in the isolation and identification of *Neisseria gonorrhoeae*. The Food and Drug Administration administered the proficiency testing program in food bacteriology, and the state laboratory evaluation officer for water and dairy products provided check samples in this area. The central laboratory conducted proficiency testing for the branch laboratories in rabies.

Microbiologists from this division attended courses offered by CDC in Atlanta in "Laboratory Methods for Detection of Legionnaire's Disease Agents" and "Laboratory Methods in Special Medical Bacteriology."

The streptococcus screening program was reinstated on a limited basis in April of 1982 but was discontinued effective November 1, 1982, because of economic problems.

Personnel—The staff consisted of two Microbiologist IV's, six Microbiologist III's, two Microbiologist II's, two Microbiologist I's, and two laboratory Technician II's.

Clerical Division

Over 537,656 reports were mailed from the central laboratory in fiscal year 1982. Handling the telephone switchboard, typing and mailing reports, maintaining personnel records, and numerous other clerical functions were carried out by one Clerk IV, one Clerk Stenographer III, two Clerk Typist III's, one Clerk III, two Clerk Stenographer II's, seven Clerk Typist II's and one Clerk Typist I. This is a decrease of one employee in the Clerical Division from the previous year.

Scientific Services

Media—In addition to preparing 409,000 Modified Thayer-Martin plates (MTM) for use in the statewide gonorrhea screening program, the media laboratory prepared 289 different media, reagents, and solutions—which include 22 new media and the attendant procedures for their preparation—for use in the central laboratory. The quantity of each follows.

Media and Reagents

Enteric Bacteriology	576 liters
General Bacteriology	421 liters
GC	7,100 liters
Sanitary Bacteriology	271 liters
Strep	57 liters

CF	123 liters
Mycology	221 liters
Regular TB	1,120 liters*
Special TB	502 liters
Miscellaneous	76 liters
TOTAL VOLUME	10,467 liters

*This volume reflects cracking aseptically and straining 400 dozen fresh eggs for use in Lowenstein-Jensen medium and handling 185 pints of blood from expired humans for use in penicillin blood agar.

Solutions

FA	320 liters
Parasitology	207 liters
IFA	399 liters
Milk and Water	979 liters
TOTAL VOLUME	1,914 liters

This section also prepared 24,801 sterile milk and water sample bottles for statewide distribution and 5,508 dilution blanks for use in the central laboratory milk testing program.

Although the cost per man hour to produce MTM has increased, this section has managed through the introduction of innovative production techniques to keep the cost per plate at last year's level. Similar techniques have been applied in the production of other media resulting in lower cost and greater productivity although there has been a decrease in personnel.

In addition this section has responsibility for constantly monitoring and performing routine maintenance on the water purification system for the entire laboratory. This entails 33 filter changes ranging from pool filters and prefilters to reverse osmosis membranes, carbon filters, deionization filters, and 0.45 micron millitube filters.

Washroom—Approximately 1.5 million pieces of glassware and other equipment were washed and/or wrapped and sterilized during the year. In addition to decontaminating all specimens delivered by the various sections of the laboratory, this unit sterilized all media and solutions, a procedure involving constant monitoring of the temperature, pressure gauges, and timers of seven autoclaves. The washroom also supplied relief personnel for the animal house.

Quality Control—The quality control section tests and evaluates all media and reagents prepared in the laboratory to ensure that they meet specific performance requirements. This section also performs weekly tests on the diagnostic reagents and monthly tests on the typing sera used by general bacteriology. Over 1,850 tests were performed on 651 lots of media for the Bacteriology Division and only five lots (less than 1 percent) were rejected.

Laboratory Technician Elijah Hunter prepares Thayer-Martin media for the gonorrhea testing program.

Also 3,692 tests were performed on Thayer-Martin (TM) media. The TM tested included 53 lots prepared for the statewide gonorrhea screening program, eight lots prepared to check new batches of enrichment or inhibitors, and one lot prepared by a commercial company. Forty-six percent of the TM tested was forwarded to CDC for review, and all lots were found acceptable by this section and CDC. The lot of commercial TM was found inferior to TM prepared by this laboratory in all areas tested.

In addition this section performed 504 tests on reagents and typing sera for general bacteriology and tested 11 new brands of currently used media. Of these 11 media, seven were found to be inferior to currently used brands and were rejected before being put into use with clinical specimens.

Other Activities—One Microbiologist IV attended an in-house laboratory workshop on "Advance Safety Management" conducted by CDC. Also one Microbiologist II attended a quality control seminar sponsored by American Scientific and BBL in Atlanta.

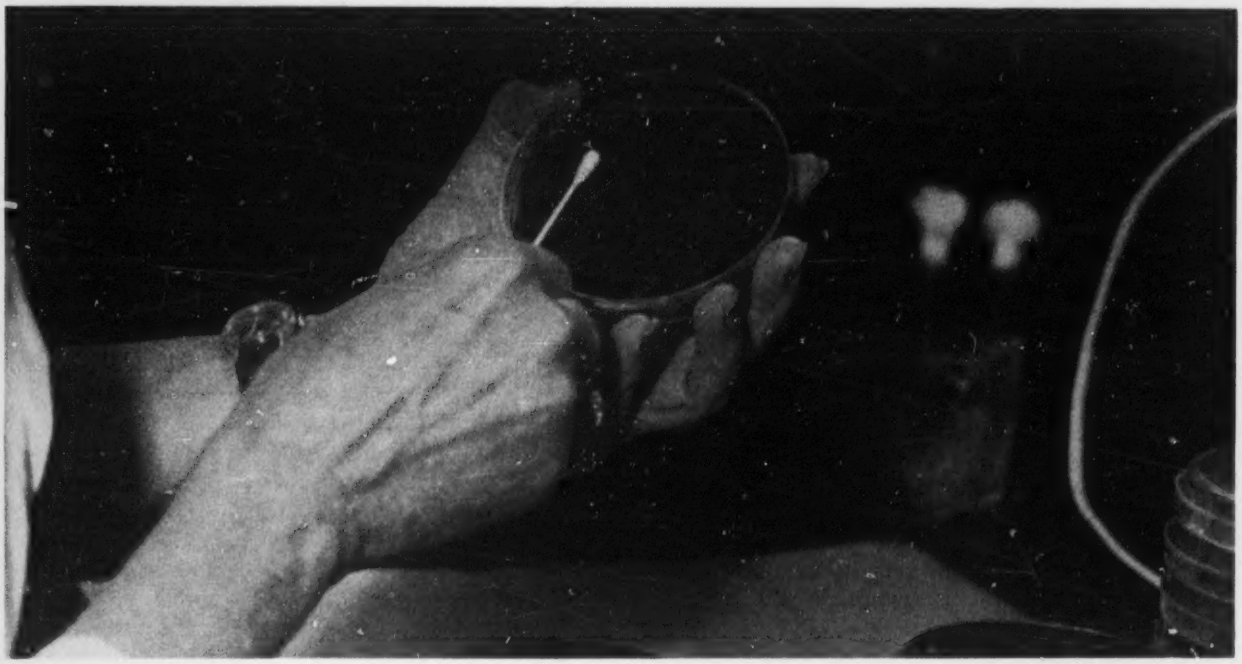
Personnel—Scientific Services employed one Microbiologist IV, one Microbiologist III, one Microbiologist II, two Laboratory Technician II's, six Laboratory Technician I's, and one Laboratory Aide II.

Serology Division

Syphilis Serology—The syphilis serology section performed 73,856 examinations on 66,747 specimens utilizing the VDRL slide agglutination test. The results of these examinations are listed in Table 4-2.

TABLE 4-2
SYPHILIS EXAMINATIONS
1982

VDRL Slide Test	Specimens	Reactives	Examinations	Percent Reactive
Routine	56,435	5,558	63,222	9
Premarital	8,732	213	9,051	2
Spinal fluids	1,580	6	1,586	



A laboratory employee is streaking a culture plate to set up for enteric bacteriology testing.

Control serums were furnished to branch and clinical laboratories on request. In addition quality control testing was performed on reagents before distribution to branch laboratories.

Six samples received from CDC as part of a proficiency testing program achieved 100 percent agreement.

Premarital Approval and Proficiency Testing—Laboratories performing premarital blood tests for syphilis were reviewed for certification. The central laboratory administered a quality control program for 99 Red Cross, blood banking and clinical laboratories performing these tests. Also laboratories licensed by the Clinical Laboratories Improvement Act (CLIA) to perform syphilis serology on an interstate basis were evaluated during the year.

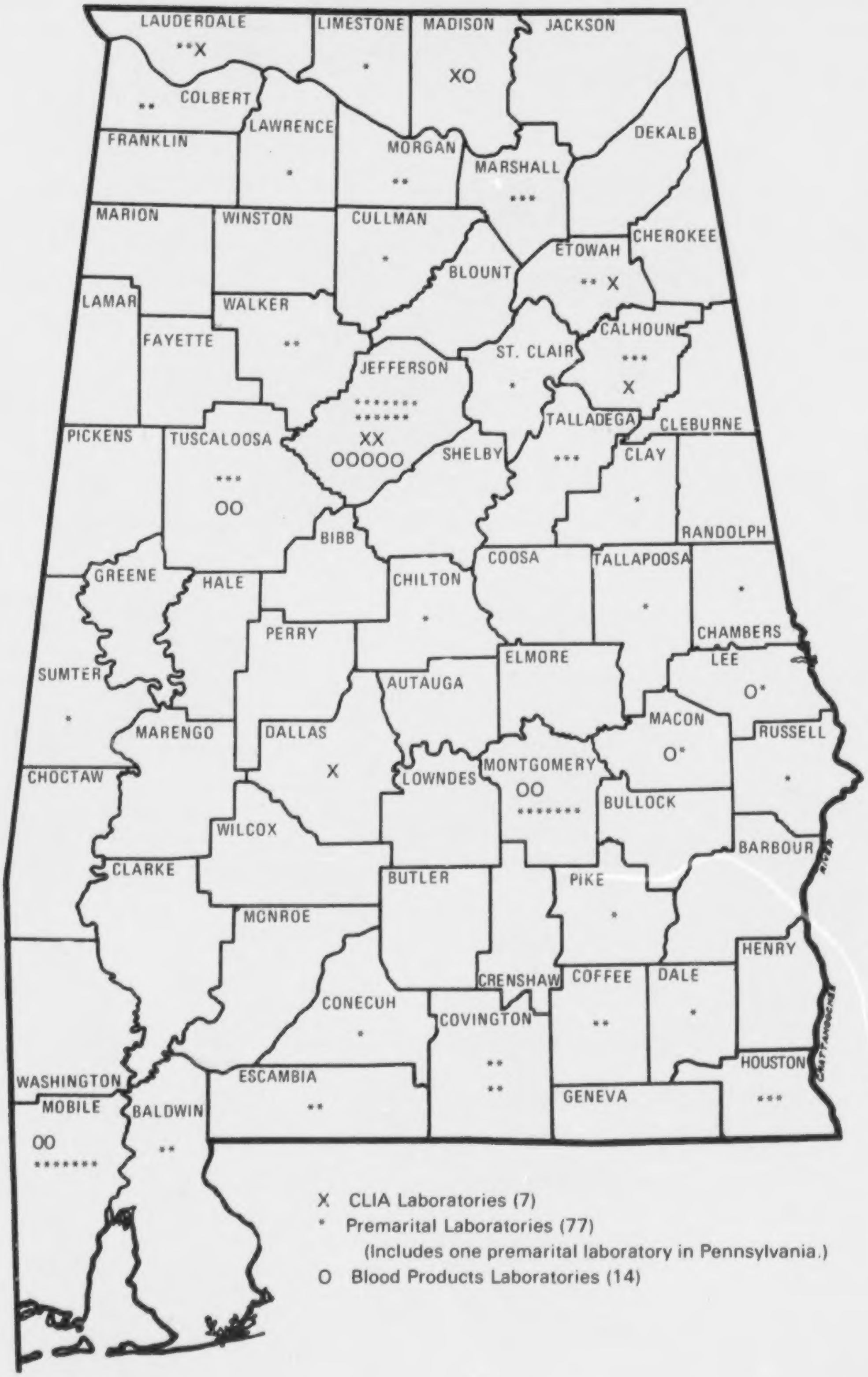
Quality control was accomplished by:

1. Sending ten prepared serum specimens of graded reactivity five times a year.
2. Evaluating and reporting results.
3. Inspecting each laboratory at least once every two years and more often if needed.
4. Consulting with laboratory personnel.
5. Training when a refresher course is indicated.

Adequacy of test performance was determined by the average disagreement of no more than 10 percent and at least a 90 percent reproducibility on paired serums.

Chart 4-2 shows the distribution of laboratories certified in syphilis serology.

CHART 4-2
SYPHILIS SEROLOGY CERTIFIED LABORATORIES



X CLIA Laboratories (7)

* Premarital Laboratories (77)

(Includes one premarital laboratory in Pennsylvania.)

O Blood Products Laboratories (14)

Bacterial Agglutination Tests—A tube agglutination test for brucella and tularemia was performed on 76 specimens. Four specimens were positive for brucella, and four specimens were positive for tularemia.

Bacterial agglutination tests were also performed on four specimens from CDC as part of the proficiency testing (general immunology) program. Results obtained were 100 percent in agreement.

Fungal, Viral and Rickettsial Serology—Complement Fixation Tests (Fungal)—A complement fixation test for histoplasmosis (both mycelial and yeast phases), blastomycosis and coccidioidomycosis was performed on 1,929 specimens. Those showing a titer of 1:8 or above were:

Histoplasma capsulatum

Mycelial	Yeast	Both
4	159	24

Blastomyces dermatitidis	45
Coccidioides immitis	4
B. dermatitidis & H. capsulatum	73
C. immitis & H. capsulatum	4
B. dermatitidis & C. immitis & H. Capsulatum	3
Unsatisfactory	55

Microimmunodiffusion Tests—During fiscal year 1982 microimmunodiffusion testing was performed on 1,929 sera for histoplasmosis and blastomycosis. From these the following bands were produced.

Histoplasmosis

M Band	176
M & H Band	69

Blastomycosis

A Band	57

Aspergillosis testing on 473 sera by this same method resulted in the following positives.

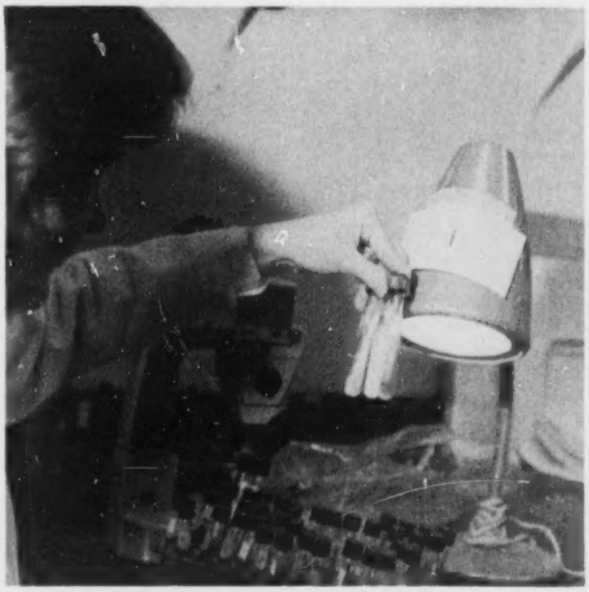
Aspergillus Species	**Positives***
Aspergillus niger	4
Aspergillus flavus	5
Aspergillus fumigatus	9

*Five specimens were positive to more than one species.

Specimens received for viral and rickettsial serology were tested against batteries of antigens. Examinations totaled 13,407.

By special request some 184 single specimens were tested. However since no interpretation of the results of a single specimen can be made, titers only were reported.

Eight samples received from CDC as a part of a viral and fungal proficiency testing program achieved 100 percent agreement and reproducibility.



Reading bacteriology cultures is one of the laboratory responsibilities.

Hemagglutination Tests—The hemagglutination inhibition (HAI) test for rubella antibodies was performed on 176 paired serums and 13,501 single specimens. None of the pairs showed a four-fold or greater rise in titer.

A fee of $10.00 per specimen was charged for routine baseline testing on samples from private physicians and laboratories.

The rubella hemagglutination inhibition procedure was performed on four proficiency testing specimens provided by CDC. Results obtained were 100 percent in agreement and reproducibility.

Seven paired sera that showed serologic evidence of a recent infection with type B influenza in the complement fixation test were also tested by HAI. The HAI results were compatible with a recent infection by B/Singapore.

The indirect hemagglutination test for amebiasis was performed on 335 specimens with positive results obtained on one of these serums.

All serum specimens referred to CDC by the central laboratory were received, processed and forwarded by the special serology section.

Complement Fixation Tests (Viral)—Paired serums for antibodies to respiratory, neurotropic, enteric and exanthem viruses, rickettsia, and chlamydia totaled 1,160. Results interpreted as compatible with recent infection (specimens showing a four-fold or greater rise in titer of the convalescent specimen over the acute specimen) were:

Influenza (Type A)	1
Influenza (Type B)	33
Adenovirus	5
Mycoplasma pneumoniae	33
Chlamydia group	11
Respiratory Syncytial	2
Herpes hominis group	16
Mumps viral	7
Spotted Fever group	21
Murine Typhus group	1
Varicella	1
Cytomegalovirus	14
Rubeola virus	2
TOTAL	147

Doris Richardson is setting up complement fixation for virus testing.

Negative results were obtained on 232 paired serums, and 13 pairs were unsatisfactory.

Results suggesting involvement at some undetermined time but not necessarily in the current illness were:

Influenza A	324
Influenza B	166
Adenovirus group	67
Mycoplasma pneumoniae	433
Chlamydia	41
Respiratory Syncytial	16
Parainfluenzae (Type 1)	2
Parainfluenzae (Type 2)	4
Parainfluenzae (Type 3)	8
St. Louis encephalitis	1
California encephalitis	1
Mumps viral	141
Herpes hominis	276
Murine Typhus	6
Spotted Fever group	21
Q Fever	2
Polio Type I	5
Polio Type II	3
Polio Type III	1
Rubeola	16
Varicella	14
Cytomegalovirus	109
TOTAL	1,657

Fluorescent Microscopy—The Fluorescent Treponemal Antibody-Absorption (FTA-ABS) test for syphilis was performed on all specimens found to be nonreactive with the microhemagglutination assay for antibodies to *Treponema pallidum*. There were 1,649 specimens examined using the FTA-ABS test with the following results:

Reactive	368
Nonreactive	1,187
Borderline	81
Unsatisfactory	13

The indirect immunofluorescence test was employed for the detection of antibodies to *Toxoplasma gondii*. Of the 856 specimens tested, titers of 1:16 or greater were obtained on 198, with 104 of these titering 1:256 or greater. Seventeen serum specimens were submitted to CDC to be tested for Igm antibodies to *T. gondii*.

The indirect immunofluorescence test was also used to detect antibodies to *Legionella pneumophila*. Of the 459 serum specimens tested, 140 had titers of 1:64 or greater. Twenty-one specimens titered 1:256 or greater, providing presumptive evidence of infection at an undetermined time. Paired sera from four patients demonstrated a four-fold or greater rise in titer, showing evidence of a recent infection.

PKU Screening—A total of 99,414 blood specimens was tested for phenylalanine levels. Results are summarized below.

Newborn (White)	31,555
Newborn (Black)	18,220
Four-week (White)	32,406
Four-week (Black)	16,432
Older Children	31
Maternal	0
Center for Developmental and Learning Disorders	10
Miscellaneous	21
REPEATS:	
Inadequate bloods	22
Upper limits of normal	133
Feeding less than 24 hours	98
Slight transient elevations	95
Dietary follow-up	391
TOTAL	99,414

No PKU positives were detected during fiscal year 1982. However three specimens were found to have persistent hyperphenylalaninemia in the range of 12-20 mg percent. The cumulative total of positives since the program began in 1964 is the same as reported last year.

Newborn (White)	43
Newborn (Black)	2
Four-week (White) First Test	2*
Older Children	5
Partlow (New Admissions)	3
TOTAL	55

*Six week old infants tested for first time by the Clinical Laboratory Administration included in this figure.

PKU Chemistry—Chemical determinations were made as follows:

Nitroprusside test for cystinuria and homocystinuria (Urine specimens)	14
Chromatography (Sulfanilic acid stained for histidine and urinary metabolites-urine specimens)	14
Chromatography (Ninhydrin stained for amino acid disorders-blood and urine specimens)	335

A total of 463 tests for amino acids was performed on 145 blood and urine specimens from physicians throughout the state.

Neonatal Hypothyroid Screening—The results of the statewide neonatal hypothyroid screening program for fiscal year 1982 are shown in Table 4-3. Table 4-4 reports the newborns tested since the program began.

TABLE 4-3
NEONATAL HYPOTHYROID SCREENING
FISCAL YEAR 1982

T_4 (Thyroxine Level) Specimens	Number Tested	Examinations	Cases Detected
Newborn (White)	31,555	31,555	7
Newborn (Black)	18,220	18,220	2
Four-week (White)	32,406	32,406	1
Four-week (Black)	16,432	16,432	1
Low T_4 Repeats	571	17,274	
TSH (Thyroid Stimulating Hormone)	—	21,932	—
TOTAL	99,184	137,819	11

TABLE 4-4
NEWBORNS TESTED
FISCAL YEAR 1982

Year	Newborns	Cases Detected	Incidence
1978	38,695	4	1/9,673
1979	50,834	10	1/5,083
1980	51,122	10*	1/5,112
1981‡	50,312	13	1/3,870
1982	49,775	11	1/4,525
TOTAL	240,738	48	1/5,015

*Includes one infant with transient hypothyroidism

‡Statistics began on a fiscal year basis

Abnormal Hemoglobin Screening (Including Sickle Cell Anemia)—Some 50,369 specimens were tested by electrophoresis for abnormal hemoglobins. The results follow.

AA	43,657
AS	3,983
AC	1,219
SS	43
SF	71
SC	76
AF	576
A high F	154
CC	19
AG Philadelphia	14
AE	111
Non S	37
Non C	19
EE	9

ASG	5
AO Arab	3
AN Baltimore	3
A Rampa	2
FA (fetal)	7
FF (fetal)	1
FAS	3
A Hope	2
CF	7
AEF	2
EF	3
AFE	1
A + fast moving	13
A Camden	6
AF + band near S	3
Fast moving + S	1
A Hope + Delta chain variant	1
AC + band below C	1

Thalassemias:

A + high A_2	33
SAF	17
SA	11
CA	8
SFA	8
AF + high A_2	5
FA	7
FF	3
AS + high A_2	1
CAF	1
EAF	1
FS	1
FAS	1
FAC	1
CAF	1
SAF + high A_2	1
Unsatisfactory	181
Repeats	36
TOTAL	50,369

Electrophoresis at an acid pH was performed on 6,536 specimens to distinguish other abnormal hemoglobins having the same mobilities as S and C at an alkaline pH.

Polypeptide chain involvement was determined by globin chain electrophoresis on 95 specimens.

Cytology—Microscopic examinations of endocervical, cervical, vaginal and breast smears for precancerous and cancerous leisons were performed in the laboratory for patients from 50 counties participating in the Cancer Detection Program

Patients with parasitic, viral, and bacterial atypias were also reported and referred for treatment.

The Papanicolaou method of staining and classifying was used by the cytotechnologists for the 19,373 specimens received during the fiscal year 1982.

All abnormal or atypical smears with a classification of II or above were referred to a pathologist for review, final diagnosis and recommendation. Quality control of the screening was maintained by review of 10 percent of all Class I smears by the pathologist.

Total Smears Screened		19,373
Class I	18,873	
Class II	382	
Class III	60	
Class IV	9	
Class V	0	
Unsatisfactory	49	
Breast smears	25	

Continuing Education—A microbiologist in the Serology Division served as training coordinator for several workshops involving personnel from health departments, blood banks, hospitals and clinical laboratories. Among these were:

1. "Laboratory Safety Management" by Dr. John E. Forney and Dr. William Wagner from CDC, Atlanta.
2. RPR workshops at the Montgomery, Mobile, Birmingham and Decatur branch laboratories by Hynson, Westcott, and Dunning, Inc., personnel.

CDC continued to furnish the laboratory with updated materials including slides, tapes, study manuals and video tapes on various laboratory subjects. These materials were made available to laboratory and teaching personnel across the state.

Other Activities—In February 1982 the Cytology Association of Alabama was organized by personnel in the Serology Division. The State Health Laboratory hosted a workshop meeting for this group on July 17, 1982. Two cytotechnologists attended both meetings.

One cytotechnologist from the laboratory attended the organizational meeting of the Alabama Alliance of Allied Health as well as subsequent meetings on February 3, 12, and 17 concerning legislative affairs and bylaws.

Two cytotechnologists attended the four day scientific workshop and annual meeting of the Southern Association of Cytotechnologists, Inc.

The Southern Association sponsored a one day meeting in Mobile, and a cytotechnologist attended.

One cytotechnologist spent a day at the Armed Forces of Pathology in Washington, D.C., reviewing cytology specimens from the registry of interesting cases.

The Student Coalition for Community Health held its annual fairs in Akron, Hamilton, Bexar, Town Creek and Tuscaloosa. The laboratory assisted by providing supplies and consultation, by screening 478 specimens for abnormal hemoglobin, and by performing 653 VDRL slide tests for syphilis.

The Serology Division continued to serve as a reference laboratory for CDC and the states of Florida, Kentucky, Missouri, North Carolina, Oklahoma, and Tennessee for the Rapid Plasma Reagin (18 mm circle) card test (RPR), the VDRL slide agglutination test, the FTA-ABS test, and the microhemagglutination assay for Treponema pallidum (MHA-TP). This division served CDC as a reference laboratory for hemoglobinopathies, rubella and febrile agglutinations.

Due to the variety of tests and services provided by the special serology section, a great deal of contact with physicians and outside agencies is required. This is accomplished through written notices and telephone conversations. The communications involve answering questions, eliciting information, providing instructions for collection and handling of specimens, stating results, interpreting results and making recommendations for additional testing.

One Microbiologist II attended the CDC course "Laboratory Diagnosis by Serologic Methods."

Personnel—Personnel consisted of one Microbiologist IV, four Microbiologist III's, seven Microbiologist II's, seven Microbiologist I's, one Laboatory Technician II, and one Laboratory Technician I.

Tuberculosis and Mycology Division

Mycobacteriology—The mycobacteriology laboratory performed 157,961 examinations on the 29,605 specimens received for tuberculosis testing during fiscal year 1982. A breakdown of examinations and results follows.

Total specimens			29,605
Microscopic smears		28,310	
Positive	926		
Negative	27,384		
Cultures for identification		864	
Unsatisfactory specimens		431	

Total cultures		29,174
Positive	1,937	
Negative	24,296	
Unsatisfactory contaminated	1,339	
Mycobacteria not *M. tuberculosis**	1,575	
Nocardia asteroides	27	

*Only 630 of these cultures were suspected pathogens and were identified as follows.

M. kansasii	23
M. marinum	4
M. scrofulaceum	7
M. avium—M. intracellulare complex	483
M. chelonei subspecies *abscessus*	65
M. fortuitum	48

Special tests performed for identification were:

Subculture		1,502
Primary biochemicals (identification of *M. tuberculosis)*		832
Secondary biochemicals (identification of all other mycobacteria)		670
Serotyping		320
Drug susceptibility test		1,250
Direct tests	312	
Indirect tests	938	

Mycology—Of the 4,273 specimens received by the mycology section, 1,017 were cultures for identification. The following pathogenic, or possible pathogenic, fungi were identified.

Blastomyces dermatitidis	10
Cryptococcus neoformans	15
Cryptococcus albidus	4
Cryptococcus laurentii	1
Histoplasma capsulatum	20
Sporothrix schenckii	8
Nocardia asteroides	3
Petriellidium boydii	6
Exophiala jeanselmei	10
Fonsecaea pedrosoi	3
Phialophora verrucosa	1
Candida albicans	104
Candida guillermondii	5
Candida krusei	16
Candida parapsilosis	58
Candida pseudotropicalis	3
Candida rugosa	1
Candida stellatoidea	1
Candida tropicalis	93
Torulopsis glabrata	98
Torulopsis candida	1
Trichosporon beigelii	7
Geotrichum candidum	18
Aspergillus fumigatus	14
Aspergillus flavus	19
Aspergillus glaucus	2
Aspergillus nidulans	21
Aspergillus niger	25
Aspergillus terreus	2
Microsporum canis	3
Microsporum gypseum	4
Microsporum nanum	2
Epidermophyton floccosum	5
Trichophyton mentagrophytes	5
Trichophyton rubrum	51
Trichophyton tonsurans	15

Animals were inoculated with two soil samples, but both were negative for *Histoplasma capsulatum*.

Other Activities—Participation in the International Working Group on Mycobacterial Taxonomy Open-ended Study on Slowly Growing Mycobacteria continued this year. A total of 102 unknown cultures has been received and examined by 47 identification procedures. The second report of this cooperative study has been submitted for publication to the *International Journal of Systematic Bacteriology*.

The Primary Drug Resistance Study with CDC was completed this year. During six years 1,420 primary tuberculosis cultures have been forwarded to CDC. From this study a survey was made comparing the drug susceptibility results of this laboratory with those obtained at CDC. Results showed 100 percent agreement on cultures CDC called susceptible and 91 percent agreement on cultures CDC called resistant. As a result of this survey, a new CDC study on Drug Susceptibility of *M. tuberculosis*-Comparability of Results Among Laboratories has been started. A total of 200 cultures will be sent to each participating laboratory to be tested, and the results of the various laboratories will be compared.

A new drug resistance study began September 30, 1982, in which cultures from never treated patients will be examined.

The mycology section served as a reference laboratory for CDC and the New York City Public Health Laboratory in their proficiency testing programs. CDC sent no proficiency testing samples in mycobacteriology this year.

This laboratory continued to give bench training to the medical technology students from Baptist Medical Center of Montgomery. The training included diagnostic methods for tuberculosis and mycology.

The personnel consisted of one Microbiologist V, one Microbiologist IV, three Microbiologist III's, five Microbiologist II's, one Microbiologist I, one Laboratory Technician III and two Laboratory Technician II's.

Birmingham Branch Laboratory

The Birmingham branch laboratory performed 327,392 examinations on 263,256 specimens in fiscal year 1982. These examinations included the following:

1. 73,992 VDRL slide tests for syphilis of which 3.9 percent were positive.
2. 153,463 *Neisseria gonorrhoeae* cultures of which 6.1 percent were positive.
3. 9,323 dairy samples of which 16.4 percent were positive.
4. 25,483 water samples of which 10.3 percent were positive.
5. 978 animal brains for rabies testing. The 31 positives found were all bats and represented a 3.1 percent positivity rate.

The state laboratory evaluation officer, assisted by the sanitary bacteriology section, prepared and submitted split milk proficiency test samples to all state milk laboratories. He also surveyed and certified eight analyses in two milk laboratories and 16 analyses in six water laboratories.

The evaluation officer attended the Alabama Dairy Conference, the Food and Drug Administration Region IV Grade A-PMO Conference, Basic Environmental Training Course, and the Environmental Protection Agency Laboratory Certification Workshop.

The Birmingham branch laboratory participated in split sample proficiency testing in rabies, *Neisseria gonorrhoeae* cultures, syphilis serology, dairy products and fluoride analysis in water. The laboratory was surveyed and certified by FDA for dairy sample testing.

The 22 county area in North Central Alabama continues to be the service area of this laboratory.

Personnel—One Microbiologist V, five Microbiologist III's, three Microbiologist II's, two Microbiologist I's, two Laboratory Technician III's, one Laboratory Technician II, four Laboratory Technician I's, one Clerk Typist III and two Clerk Typist II's were employed by the Birmingham branch laboratory.

Decatur Branch Laboratory

The Decatur branch laboratory performed 131,179 tests on 93,953 specimens in fiscal year 1982. These specimens included the following:

1. 34,216 VDRL slide tests for syphilis of which 2.7 percent were positive with 2,817 of the tests being for premarital certificates.
2. 12,726 blood specimens were tested for the Rh factor.
3. 4,654 milk and dairy products of which 15.6 percent were positive.
4. 15,973 public and private water samples of which 11 percent were positive.
5. 25,499 *Neisseria gonorrhoeae* cultures of which 7.0 percent were positive.
6. 779 animal brains were tested for rabies. The 41 positives found represented a 5.7 percent positivity rate.

The Decatur branch laboratory continued to participate in the proficiency testing programs for milk analysis, syphilis serology, and rabies. Rh factor check specimens were received from CDC.

Rabies specimens continued to increase due to positive specimens found in seven North Alabama counties. Positives included 26 skunks, 11 bats, 2 foxes, 1 dog and 1 cat. The positive skunks were limited to Limestone, Lauderdale and Madison counties.

Laboratory personnel conducted tours of the laboratory to interested groups, lectured to microbiology classes from

Calhoun Junior College and in-service meetings of Tri-County District Health Services nurses.

Personnel—The laboratory staff consisted of one Microbiologist IV, one Microbiologist III, three Microbiologist II's, two Laboratory Technician II's and one Clerk Typist II.

Dothan Branch Laboratory

The Dothan branch laboratory performed 27,213 examinations on 15,608 specimens this year. These examinations included the following:

1. 1,877 dairy samples of which 24 percent were positive.
2. 6,589 water samples from public and private sources of which 5.3 percent were positive.
3. 7,081 *Neisseria gonorrhoeae* cultures of which 9.9 percent were positive.

The laboratory also shipped 483 animal heads to the central laboratory for rabies testing.

The laboratory continued to participate in the proficiency testing programs for milk analysis and *Neisseria gonorrhoeae*.

The seven counties in the southern corner of the state continued to be the service area of this laboratory.

Personnel—The staff consisted of one Microbiologist III, one Laboratory Technician II and one Laboratory Technician I.

Mobile Branch Laboratory

The Mobile branch laboratory performed 138,295 examinations on 111,610 specimens this year. The following examinations were performed:

1. 45,680 slide tests for syphilis, a 12 percent increase over last year. Of the total tests, 15 percent were premaritals.
2. 172 shellfish samples were tested, a 12 percent decrease from last year. Forty-two percent of the samples exceeded coliform standards, compared to 30 percent last year.
   A total of 189 bay water samples was tested for a 38 percent increase over the previous year.
3. 49,927 *Neisseria gonorrhoeae* cultures, an 11 percent decrease from last year. Of this number 6 percent were positive. The Beta-lactamase strip test was positive for 18 penicillinase producing gonorrhea cultures.
4. 217 animal brains were examined for rabies, an 8 percent decrease from fiscal year 1981. One positive bat was found, compared to three positives—1 dog, 1 bat, and 1 raccoon—for the previous year.
5. 2,372 dairy samples, a 38 percent decrease from fiscal year 1981. Positive tests increased from 23 percent to 28 percent of all samples.
6. 12,864 water samples were received, a 4 percent decrease from 1981.

Membrane filter plates	12,864
MPN tube method	94
IMVIC tests	11

In other activities the laboratory received proficiency testing specimens for rabies, *Neisseria gonorrhoeae*, syphilis serology, bay waters and milk testing.

A survey and evaluation of the shellfish testing program was conducted by the U.S. Food and Drug Administration. The evaluation stated that the laboratory has excellent standards. The laboratory is one of 12 in the United States and Canada that comprise the Microbiology Task Force of the National Shellfish Sanitation Program.

One microbiologist participated in a course conducted by CDC on "Laboratory Safety Management" held at the central laboratory in Montgomery.

Personnel—The staff consisted of one Microbiologist V, one Microbiologist III, five Microbiologist II's, one Microbiologist I, three Laboratory Technician I's and one Clerk Typist II.

Walter Creighton, director of the branch laboratory in Mobile, participates in the shellfish samples testing.

TABLE 4-5
COMBINED CLINICAL LABORATORIES
FISCAL YEAR 1982

LABORATORY Combined REPORT PERIOD FY 82

SEROLOGY-CYTOLOGY-METABOLIC			SPECIMENS	POSITIVES	NEGATIVES	UNSAT.	EXAMS
Cytology			19,373			49	19,899
STS	VDRL-Routine	WR 3,127	185,183	7,828	172,565	1,663	196,734
	VDRL-Premarital	WR 270	33,819	234	33,176	139	34,334
	VDRL-Spinal Fluid		1,580	6	1,553	21	1,565
	MHA-TP		3,168				3,168
Bacterial Agglutination			76	6	146		152
Rh Factor			12,726			35	20,653
Agar Gel			4,349	311	4,036	2	4,349
CF	Viral		2,630				13,407
	Fungal		1,975				7,900
HI	Rubella-Influenza-SLE-Dengue		13,691				14,165
IHA	Amebiasis		335			1	334
IFA	FTA-ABS	B 81	1,649	368	1,187	13	1,813
	Toxoplasmosis > 256	106	856	198	654	4	889
	Legionnaires		459			3	464
	Rickettsia		27				54
META-BOLIC	Hemaglobinopathies		50,369			181	57,063
	PKU-Guthrie		99,414				99,414
	PKU-Chromatography		145				463
	CSF-Total Protein		1,580	181	420	979	601
	Hypothyroid		99,184				137,819
BACTERIOLOGY							
Enteric			2,494	804	1,513	177	3,207
Sanitary-Dairy			23,104	4,434	18,300	403	70,430
Potable Water			77,949	6,230	68,090	3,656	150,107
Fluorine			632	5	605	22	632
Bay Water			189	29	160		378
Shellfish			172	72	100		688
Food Bacteriology			200	13	187		250
General Bacteriology			880	675	66	91	22,714
Staphylococcus			68	38	30		62
Diphtheria			64		63	1	63
Bordetella pertussis-Culture			21	3	17	1	20
Legionella			83	1	71	11	820
GC Culture-PPNG Screening		19,120	303,004	20,432	278,295	4,277	341,672
Parasitology			12,761	1,883	10,340	538	12,349
Rabies-FA			3,295	172	2,994	130	3,177
Bordetella pertussis-FA			35	2	33		118
Streptococci			873	70	803		1,184
TB-MYCOLOGY							
TB	Microscopic Smears		28,741	926	27,384	431	28,310
	Referred Cultures		864				
	Total Cultures			1,937	25,069	1,339	157,961
Mycology			4,273				40,893
CHECK SPECIMENS			1,007				3,435
TOTALS			993,297	50,442	647,857	14,167	1,453,710

TABLE 4-6
MONTGOMERY CLINICAL LABORATORY
FISCAL YEAR 1982

LABORATORY Montgomery REPORT PERIOD FY 82

SEROLOGY-CYTOLOGY-METABOLIC			SPECIMENS	POSITIVES	NEGATIVES	UNSAT.	EXAMS
Cytology			19,373			49	19,899
STS	VDRL-Routine	WR 1,858	56,435	3,700	49,712	1,165	62,057
	VDRL-Premarital	WR 140	8,732	73	8,442	77	8,974
	VDRL-Spinal Fluid		1,580	6	1,553	21	1,565
	MHA-TP		3,168				3,168
Bacterial Agglutination			76	6	146		152
Rh Factor							
Agar Gel			4,349	311	4,036	2	4,349
CF	Viral		2,630				13,407
	Fungal		1,975				7,900
HI	Rubella-Influenza-SLE-Dengue		13,691				14,165
IHA	Amebiasis		335			1	334
IFA	FTA-ABS	B 81	1,649	368	1,187	13	1,813
	Toxoplasmosis	> 256 106	856	198	654	4	889
	Legionnaires		459			3	464
	Rickettsia		27				54
META-BOLIC	Hemaglobinopathies		50,369			181	57,063
	PKU-Guthrie		99,414				99,414
	PKU-Chromatography		145				463
	CSF-Total Protein		1,580	181	420	979	601
	Hypothyroid		99,184				137,819
BACTERIOLOGY							
Enteric			2,494	804	1,513	177	3,207
Sanitary-Dairy			4,900	1,065	3,830	5	15,861
Potable Water			17,611	1,234	15,547	830	33,148
Fluorine							
Bay Water							
Shellfish							
Food Bacteriology			200	13	187		250
General Bacteriology			880	675	66	91	22,714
Staphylococcus			68	38	30		62
Diphtheria			64		63	1	63
Bordetella pertussis-Culture			21	3	17	1	20
Legionella			83	1	71	11	820
GC Culture-PPNG Screening		4,357	67,044	5,490	60,550	1,004	74,760
Parasitology			12,761	1,883	10,340	538	12,349
Rabies-FA			1,321	99	1,173	50	1,323
Bordetella pertussis-FA			35	2	33		118
Streptococci			873	70	803		1,184
TB-MYCOLOGY							
TB	Microscopic Smears		28,741	926	27,384	431	28,310
	Referred Cultures		864				
	Total Cultures			1,937	25,069	1,339	157,961
Mycology			4,273				40,893
CHECK SPECIMENS			655				2,038
TOTALS			508,915	21,268	212,826	6,973	829,631

TABLE 4-7
BIRMINGHAM CLINICAL LABORATORY
FISCAL YEAR 1982

LABORATORY Birmingham REPORT PERIOD FY 82

SEROLOGY-CYTOLOGY-METABOLIC		SPECIMENS	POSITIVES	NEGATIVES	UNSAT.	EXAMS
Cytology						
STS	VDRL-Routine WR 707	58,367	2,033	55,375	252	61,460
	VDRL-Premarital WR 93	15,572	93	15,343	43	15,715
	VDRL-Spinal Fluid					
	MHA-TP					
Bacterial Agglutination						
Rh Factor						
Agar Gel						
CF	Viral					
	Fungal					
HI	Rubella-Influenza-SLE-Dengue					
IHA	Amebiasis					
IFA	FTA-ABS B					
	Toxoplasmosis > 256					
	Legionnaires					
	Rickettsia					
META-BOLIC	Hemaglobinopathies					
	PKU-Guthrie					
	PKU-Chromatography					
	CSF-Total Protein					
	Hypothyroid					
BACTERIOLOGY						
Enteric						
Sanitary-Dairy		9,301	1,529	7,432	340	27,111
Potable Water		24,818	2,645	20,932	1,241	47,934
Fluorine		632	5	605	22	632
Bay Water						
Shellfish						
Food Bacteriology						
General Bacteriology						
Staphylococcus						
Diphtheria						
Bordetella pertussis-Culture						
Legionella						
GC Culture-PPNG Screening 9,448		153,453	9,426	142,314	1,713	173,051
Parasitology						
Rabies-FA		978	31	903	44	934
Bordetella pertussis-FA						
Streptococci						
TB-MYCOLOGY						
TB	Microscopic Smears					
	Referred Cultures					
	Total Cultures					
Mycology						
CHECK SPECIMENS		135				555
TOTALS		263,256	16,562	242,904	3,655	327,392

TABLE 4-8
DECATUR CLINICAL LABORATORY
FISCAL YEAR 1982

LABORATORY Decatur REPORT PERIOD FY 82

SEROLOGY-CYTOLOGY-METABOLIC		SPECIMENS	POSITIVES	NEGATIVES	UNSAT.	EXAMS
Cytology						
STS	VDRL-Routine WR 299	31,399	600	30,364	136	32,296
	VDRL-Premarital WR 11	2,817	30	2,777	9	2,828
	VDRL-Spinal Fluid					
	MHA-TP					
Bacterial Agglutination						
Rh Factor		12,726			35	20,653
Agar Gel						
CF	Viral					
	Fungal					
HI	Rubella-Influenza-SLE-Dengue					
IHA	Amebiasis					
IFA	FTA-ABS B					
	Toxoplasmosis > 256					
	Legionnaires					
	Rickettsia					
META-BOLIC	Hemaglobinopathies					
	PKU-Guthrie					
	PKU-Chromatography					
	CSF-Total Protein					
	Hypothyroid					
BACTERIOLOGY						
Enteric						
Sanitary-Dairy		4,654	726	3,924	37	14,279
Potable Water		15,973	1,727	13,745	528	31,310
Fluorine						
Bay Water						
Shellfish						
Food Bacteriology						
General Bacteriology						
Staphylococcus						
Diphtheria						
Bordetella pertussis-Culture						
Legionella						
GC Culture-PPNG Screening 1,507		25,499	1,782	23,268	449	28,721
Parasitology						
Rabies-FA		779	41	710	28	711
Bordetella pertussis-FA						
Streptococci						
TB-MYCOLOGY						
TB	Microscopic Smears					
	Referred Cultures					
	Total Cultures					
Mycology						
CHECK SPECIMENS		106				381
TOTALS		93,953	5,206	74,788	1,222	131,179

TABLE 4-9
DOTHAN CLINICAL LABORATORY
FISCAL YEAR 1982

LABORATORY Dothan REPORT PERIOD FY 82

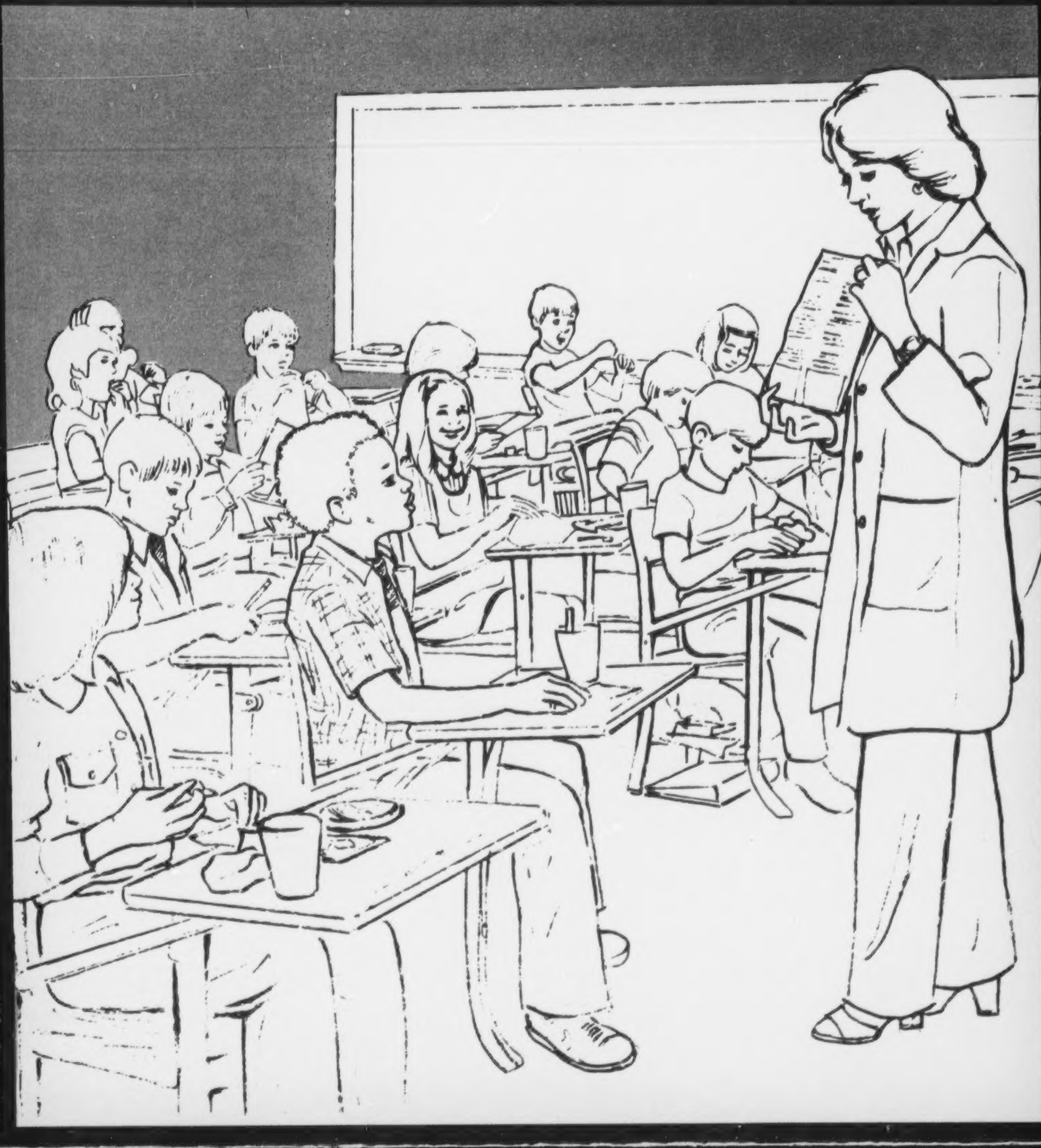
SEROLOGY-CYTOLOGY-METABOLIC		SPECIMENS	POSITIVES	NEGATIVES	UNSAT.	EXAMS
Cytology						
STS	VDRL-Routine WR					
	VDRL-Premarital WR					
	VDRL-Spinal Fluid					
	MHA-TP					
Bacterial Agglutination						
Rh Factor						
Agar Gel						
CF	Viral					
	Fungal					
HI	Rubella-Influenza-SLE-Dengue					
IHA	Amebiasis					
IFA	FTA-ABS B					
	Toxoplasmosis > 256					
	Legionnaires					
	Rickettsia					
META-BOLIC	Hemaglobinopathies					
	PKU-Guthrie					
	PKU-Chromatography					
	CSF-Total Protein					
	Hypothyroid					
BACTERIOLOGY						
Enteric						
Sanitary-Dairy		1,877	448	1,421	8	5,912
Potable Water		6,589	347	6,091	151	12,712
Fluorine						
Bay Water						
Shellfish						
Food Bacteriology						
General Bacteriology						
Staphylococcus						
Diphtheria						
Bordetella pertussis-Culture						
Legionella						
GC Culture-PPNG Screening 702		7,081	702	6,212	167	8,565
Parasitology						
Rabies-FA						
Bordetella pertussis-FA						
Streptococci						
TB-MYCOLOGY						
TB	Microscopic Smears					
	Referred Cultures					
	Total Cultures					
Mycology						
CHECK SPECIMENS		16				24
TOTALS		15,563	1,497	13,724	326	27,213

TABLE 4-10
MOBILE CLINICAL LABORATORY
FISCAL YEAR 1982

LABORATORY Mobile REPORT PERIOD FY 82

SEROLOGY-CYTOLOGY-METABOLIC		SPECIMENS	POSITIVES	NEGATIVES	UNSAT.	EXAMS
Cytology						
STS	VDRL-Routine WR 263	38,982	1,495	37,114	110	40,921
	VDRL-Premarital WR 26	6,698	48	6,614	10	6,817
	VDRL-Spinal Fluid					
	MHA-TP					
Bacterial Agglutination						
Rh Factor						
Agar Gel						
CF	Viral					
	Fungal					
HI	Rubella-Influenza-SLE-Dengue					
IHA	Amebiasis					
IFA	FTA-ABS B					
	Toxoplasmosis > 256					
	Legionnaires					
	Rickettsia					
META-BOLIC	Hemaglobinopathies					
	PKU-Guthrie					
	PKU-Chromatography					
	CSF-Total Protein					
	Hypothyroid					
BACTERIOLOGY						
Enteric						
Sanitary-Dairy		2,372	666	1,693	13	7,267
Potable Water		12,958	277	11,775	906	25,003
Fluorine						
Bay Water		189	29	160		378
Shellfish		172	72	100		688
Food Bacteriology						
General Bacteriology						
Staphylococcus						
Diphtheria						
Bordetella pertussis-Culture						
Legionella						
GC Culture-PPNG Screening 3,106		49,927	3,032	45,951	944	56,575
Parasitology						
Rabies-FA		217	1	208	8	209
Bordetella pertussis-FA						
Streptococci						
TB-MYCOLOGY						
TB	Microscopic Smears					
	Referred Cultures					
	Total Cultures					
Mycology						
CHECK SPECIMENS		95				437
TOTALS		111,610	5,909	103,615	1,991	138,295

Bureau of Dental Health



BUREAU OF DENTAL HEALTH

Dental Health Education

School Health Programs—Bureau of Dental Health staff members combined efforts with district and local health departments, local dental professionals, school nurses, vocational education students and other volunteers for a successful 1982. Over 30,836 elementary school students and teachers received dental health education through the 1982 Alabama Smile Keeper Program. Twelve school systems received ASK during 1982. Two were first-time recipients, and the other ten were visited for the second or third time. Table 5-1 gives more details about the number served by ASK.

TABLE 5-1
SCHOOL DENTAL HEALTH
EDUCATION PROGRAMS
1982

	Students	Teachers
Public Health Area I		
Decatur City System	1,493	63
Lawrence County System	1,175	39
TOTAL	2,668	102
Public Health Area II		
Hale County	2,027	71
Public Health Area III		
Shelby County System	1,000	33
Walker County System	5,697	250
TOTAL	6,697	283
Public Health Area IV		
DeKalb County System	4,500	200
Chambers County System	4,204	130
TOTAL	8,704	330
Public Health Area V		
Autauga Academy	250	10
Elmore County System	3,527	127
Dothan City System	4,500	200
TOTAL	8,277	337
Public Health Area VI		
Thomasville City System	800	42
Marion City System	480	18
TOTAL	1,200	60
TOTAL 1982	29,653	1,183
1974-1981 TOTAL	264,222	10,693
GRAND TOTAL	293,875	11,876

Only 26 of the 127 public school systems have never been reached through this school based program; so these remain as top priority for future years. Some systems have their own unique dental health programs and do not need assistance while others plan to schedule ASK as soon as possible.

Head Start—Alabama Head Start programs received dental health education from the Bureau of Dental Health since the Region IV Head Start office in Atlanta requested state assistance. Approximately 5,166 children, parents, teachers and other staff were reached through workshops with thirteen Alabama Head Start programs. Each center affiliated with the programs received kits containing teacher guides, posters, student booklets, parent literature, oral hygiene supplies and other teaching aids. Besides implementing educational programs, bureau staff members also served as technical consultants, evaluating dental services and recommending operating procedures. Table 5-2 gives a breakdown of people served.

TABLE 5-2
HEAD START
DENTAL HEALTH EDUCATION
1982

	Children	Teachers
Public Health Area I		
Cullman County	350	52
Morgan-Lawrence	300	43
Huntsville-Madison	300	42
TOTAL	950	137
Public Health Area III		
Jefferson County	750	80
Public Health Area IV		
DeKalb-Jackson-Marshall-Cherokee	600	60
Chambers-Tallapoosa-Coosa	700	79
Calhoun-Cleburne	300	50
TOTAL	1,600	189
Public Health Area V		
Lee County		75
Eufaula City	40	10
Pike-Butler County	350	14
Lowndes County	300	50
Macon County	450	43
Elmore County	100	28
TOTAL	1,240	220
GRAND TOTAL	4,540	626

High School and College Programs—Vocational education schools were visited during 1982, as bureau staff members educated 79 health occupation students in Elmore and Chambers counties. These students then assisted bureau consultants in teaching oral hygiene procedures to elementary school children and assisted with fluoride mouthrinse, fluoride brush-ins and mobile dental unit programs.

Thirty graduate students in education received a comprehensive dental health workshop at the University of Alabama in Birmingham. Most course participants were elementary or high school teachers seeking additional training in health education

Brush-in—The newest school health program for the Bureau of Dental Health was the Fluoride Brush-in Program. Chilton County schools served as a pilot for the program because of their easy access to Montgomery and because the residents there do not have fluoridated water. The program's goal was to serve school age Alabamians who were not receiving fluoride benefits from their water or from the bureau's Fluoride Mouthrinse Program.

Of the 2,500 eligible third through eighth graders in Chilton County, 1,550 students received parental consent and participated in the program. An additional 25 teachers also brushed their teeth with the concentrated fluoride paste. Bureau staff supervised the activity and were joined by local volunteers.

Students participating received their first application in the fall of 1982. A second application should occur six months later in the spring of 1983. The program was well received because the students received a free brush, applied the paste themselves and then emptied their mouths, making it a topical treatment only, and because they were informed that the self applied application can reduce future dental decay as much as 25 percent.

The Bureau of Dental Health also provided fluoride brush-in supplies to the Mobile County Health Department for its staff to reach 2,500 people through a similar self applied fluoride program.

Health Fairs—Not only did the Bureau of Dental Health provide free literature for various health fairs across the state during 1982, but staff members also participated in the National Health Week observance. During the week-long health fair, 498 participants were examined for oral cancer. Portable dental equipment was set up at the capitol, at various college campuses and at local malls as the free dental service was provided. Again local dentists were very cooperative as they assisted the Bureau of Dental Health.

Nursing Home and Handicapped Programs

Nursing Home Program—During 1982 the Nursing Home Program was presented to 14 extended care facilities. The program benefited 666 staff members and 1,401 patients.

The elderly have a much higher incidence of oral cancer; therefore great emphasis was placed on this program during the year. Instructions for giving a soft tissue examination were given to nursing staff and recommendations were made that each patient should have such an examination every three to six months.

During the program it is stressed that nurses and aides should be able to recognize any abnormal changes in the mouth and promptly report them to the patient's physician or dentist for further treatment or referral.

The Alabama Nursing Home Association held its annual convention this year in Mobile; the association requested a dental health segment on their program. Nursing homes are now required to provide a dental health education program for staff members on a yearly basis in order to pass regulations. Presenting the program at this convention gave the bureau an opportunity to acquaint some 150 nursing home administrators with the educational program which the bureau provides. As a result of presenting the program at this convention, the bureau received many requests for programs from facilities across the state.

Susan Bienia (foreground) and Pat Williams are teaching oral hygiene to handicapped children at the Children's Center in Montgomery.

Programs for the Handicapped—A program for the handicapped was presented at Valley Haven School in Fairfax. This school serves 114 handicapped students. Valley Haven has a dedicated staff of 21 teachers who help the students brush and floss at school each day. The teachers also used the knowledge they gained from the dental health program in talking to the parents of each child about assisting the child at home with a regular oral hygiene regimen.

Special Programs—The Bureau of Dental Health also participated in a special program for Gadsden Business

College. This small college trains young women to be medical assistants, and they are required to have some knowledge of dental emergencies and the prevention of dental disease. Some 80 students and staff members attended this workshop.

The Alabama Health Care School in Montgomery is involved in training young women to become nurses aides. This school requested the bureau to give the students complete training in dental health and oral hygiene. Two classes totaling 50 students were given instruction and tested on their dental knowledge.

Fluoridation

As 1982 ended, there were nearly 2.6 million Alabamians receiving fluoridated water either directly or indirectly from 86 water systems. During the past year, more than 91,000 people began receiving fluoridated water from one of the systems listed in Table 5-3.

TABLE 5-3
NEWLY FLUORIDATED WATER SYSTEMS
1982

System	County	Health Area	Population
Brantley	Crenshaw	5	1,236
Butler	Choctaw	6	2,265
Centre	Cherokee	4	5,586
Daphne	Baldwin	6	5,685
Grand Bay	Mobile	6	4,500
Gulf Shores	Baldwin	6	4,260
Holtville	Elmore	5	3,135
Irondale	Jefferson	3	9,000
Macedonia	Dale	5	615
Monroeville	Monroe	5	8,292
Perdido Bay	Baldwin	6	2,043
Pine Hill	Wilcox	6	5,481
Sylacauga	Talladega	4	20,073
Trussville	Jefferson	3	10,431
Warrior River Authority	Jefferson	3	8,880
TOTAL			91,482

In addition to these systems, Columbiana and Summerdale passed ordinances to fluoridate.

Although there were 15 systems that began fluoridating this year, a report must be made of the first system in Alabama to stop fluoridating because of customer request. After an extensive anti-fluoridation campaign by a local group, the citizens of Greensboro voted to stop the addition of fluoride to their drinking water.

Fluoride Mouthrinse Program

The Alabama Fluoride Mouthrinse Program continued its significant growth during 1982. Of the 98,793 children and teachers who were offered the program, 83 percent actually participated. The program has been endorsed by 55 school systems and has been implemented in 266 schools in fluoride deficient areas of the state.

TABLE 5-4
PARTICIPATION IN FLUORIDE MOUTHRINSE PROGRAM
1982

Year	Teachers	Children	Total Participants	Increase
1977	26	500	526	—
1978	90	2,300	2,390	354%
1979	387	8,908	9,295	289%
1980	1,307	29,400	30,707	230%
1981	2,575	57,718	60,293	96%
1982	2,436	79,590	82,026	36%

The mouthrinsing is supervised in the classrooms by teachers, teacher aids, health personnel or local volunteers. The recommended regimen is for children, kindergarten through the sixth grade, to rinse for 60 seconds once a week for 34 weeks during the school term. Kindergarten children rinse with 5 milliliters of the fluoride solution, but all others use 10 milliliters.

For the 82,026 participants in 1982, the individual rinses totaled 2,788,884 at a cost of $.0106 per rinse. Since it has been estimated that regular rinsing with the fluoride solution can reduce dental caries by 35 percent, this program is one of the most cost effective dental health measures available.

Weekly fluoride mouthrinsing has the following advantages.

1. The procedure has been consistently effective in reducing tooth decay.
2. Little classroom time is required. (Only about 5 minutes per week.)
3. The technique is easy for school age children to learn.
4. Few materials are needed; the cost is minimal. ($.36 per child for the school year.)
5. Nondental persons with minimal training can supervise the procedure.
6. The procedure is well-accepted by the participants.

TABLE 5-5
FLUORIDE MOUTHRINSE PROGRAM
1982

County or City	Children	Teachers
Public Health Area I		
Colbert County Head Start	140	8
Cullman County	500	20
Franklin County	276	6
Lauderdale County	1,000	50
Lawrence County	572	18
Marion County	2,010	102
TOTAL	4,498	204
Public Health Area II		
Hale County	504	24
West Ala. District Health Dept.	10,000	300
TOTAL	10,504	324
Public Health Area III		
Blount County	903	28
Stanton Christian School (Chilton)	80	4
Jefferson County	740	15
Shelby County	1,884	80
Walker County	1,008	26
Carbon Hill City	408	11
TOTAL	5,023	164
Public Health Area IV		
Calhoun County	2,244	66
Piedmont City	808	26
Chambers County	477	17
Cherokee County	1,401	40
Clay County	1,280	41
Coosa County	1,256	64
DeKalb County	565	1
Randolph County	1,244	40
Roanoke City	501	10
Tallapoosa County	402	13
TOTAL	10,178	318

TABLE 5-5 (Continued)
FLUORIDE MOUTHRINSE PROGRAM
1982

County or City	Children	Teachers
Public Health Area V		
Autauga County	780	18
Barbour County	1,303	29
Bullock County	1,008	27
Butler County	1,792	98
Coffee County	969	50
Elba City	520	21
Covington County	245	10
Florala City	275	11
Opp City	1,000	39
Crenshaw County	761	21
Elmore County	1,013	0
Edgewood Academy	136	1
Geneva County	160	0
Geneva City	560	26
Houston County	3,500	65
Lowndes County	1,261	31
Lowndes Academy	187	5
Pike County	280	0
Russell County	1,208	21
TOTAL	16,958	473
Public Health Area VI		
Baldwin County	2,141	108
Choctaw County	1,448	16
Clarke County	2,393	65
Thomasville City	785	2
Conecuh County	809	31
Escambia County	2,598	48
Brewton City	740	0
Mobile County	16,724	500
Monroe County	1,460	60
Perry County	888	42
Marion City	450	17
Washington County	1,993	64
TOTAL	32,429	953
GRAND TOTAL	79,590	2,436

Clinical Activities

Activities in the mobile dental unit were concentrated primarily in the central portion of the state. Areas of greatest need were determined, and the unit moved into these areas for three month intervals to try to alleviate the great backlog of dental problems.

The mobile unit was located in Chambers County during January, February and March. The unit provided clinical services and preventive dental health education for a total of 360 children.

Community interest in the dental problems of school age children became so great that the local health council contacted the Bureau of Dental Health for information on how they could help perpetuate the dental program.

During the three month period, the bureau worked cooperatively with the health council and presented programs for the teachers in all the county schools, nursing homes, schools for the handicapped and other interested groups. All county schools were involved in classroom brushing and flossing sessions; some began a fluoride mouthrinse program; children who were selected from a survey had dental sealants placed on their teeth as a preventive measure.

Information on this comprehensive program was compiled and entered in the Community Health Program competition which is sponsored by the American Dental Association.

After completion of the program in Chambers County, the Smilemobile was moved to Autauga County. The Autaugaville Elementary School was the site where the unit was initially parked; and when the school year ended, it was moved to the Autauga County Health Department. During the five month period in Autauga County, the mobile unit served 818 patients.

For the remainder of the year, the mobile unit was stationed in Elmore County, first at Wetumpka Elementary School and next at Holtville Elementary School. Activities are summarized in Table 5-6.

TABLE 5-6
MOBILE UNIT ACTIVITIES
1982

Location	Number of Visits	Completions	Units of Service
Chambers Co.	360	146	10,345
Autauga Co.	818	223	26,802
Elmore Co.	766	219	19,325
TOTAL	1,944	588	56,472

Other clinical activities in Bullock, Macon and Lee counties provided services for 1,887 children. The total number of patients completed was 1,006. No clinical activities are conducted during the months of June, July and August when school is not in session.

TABLE 5-7
SCHOOL CLINICAL SERVICES
1982

Location	Number of Visits	Completions	Units of Service
Bullock Co.	409	112	11,800
Lee Co.	779	569	18,929
Macon Co.	699	325	19,744
TOTAL	1,887	1,006	50,473

During the year the 3,831 patients treated were given preventive health education instructions. Of these patients, 1,594 were completely restored to good dental health.

Material Requests

The bureau has responded to numerous requests for dental health education material this year. The Alabama Dental Auxiliary received more than 25,000 dental health brochures for distribution in local schools, dental offices, hospitals and health fairs. Dental health literature is also distributed on a request basis to out-of-state dental professionals, local health councils, local dental professionals, student teachers and interested parents.

The mobile unit is utilized by Dr. Fred B. Hunt to provide preventive and restorative dental care.

Sealant Program

The Bureau of Dental Health is in its second year of a preventive dentistry program using adhesive sealants. Public health dentists and two local dentists applied sealants in Chambers County. From the 100 students examined last year, only 50 were selected for sealants. Of the 364 permanent teeth sealed, 169 were pre-molars and 195 were molars.

Follow-up examinations are an important part of the program in order to determine the retention percentage of the sealants. This year, the pilot sealant program in Pike County was the site for re-examination of the sealants. Only 79 of the 92 students were available for the study. Tables 5-8 and 5-9 give details of the findings. The statistics given in these tables demonstrate an overall 88.2 percent retention rate of the sealants applied in Pike County after one year.

TABLE 5-8
RESULTS OF PIKE COUNTY SEALANT PROGRAM
1982

	Brundidge Elementary	Brundidge High School	TOTAL
No. of Students	28	51	79
No. of Teeth Sealed	125	662	787
Seal. Intact			
Noncaries	93	569	662
Caries	0	32	32
Sealant Missing			
Tooth Noncaries	0	30	30
Tooth Caries	0	11	11
Sealant Missing & Developing Caries			
O	10	3	13
M	4	0	4
D	0	0	0
Sealant Reapplied	10	9	19
Sealant on Additional Erupt. Teeth	6	8	14
Sealed Tooth Now Filled	2	0	2

TABLE 5-9
COMPARISON OF RETENTION RATES
MOLARS TO BICUSPIDS
1982

	Brundidge Elementary	Brundidge High School	TOTAL
Total Molars Sealed	97	265	362
Sealant Intact	71	237	308
Percent of Retention	74.0	89.4	
Sealant Missing	26	28	54
Total Bicuspids Sealed	22	389	441
Sealant Intact	22	374	396
Percent of Retention	100.0	96.1	
Sealant Missing	0	15	15

Sherry Goode assists a child in learning the proper technique for brushing her teeth.

Flossing is serious business for the youngster who has participated in the Alabama Smile Keeper Program.

Environmental Health Administration

ENVIRONMENTAL HEALTH ADMINISTRATION

A complete restructuring of the Environmental Health Administration occurred in 1982. Legislative action created the Department of Environmental Management effective October 1. The Environmental Health Laboratory, the Division of Public Water Supplies, the Division of Solid and Hazardous Waste, the Alabama Air Pollution Control Commission, and the Alabama Water Improvement Commission are no longer under the aegis of the Health Department but are a part of the new department. Concurrently three units of the administration were elevated to bureau status, and sections became divisions.

BUREAU OF GENERAL SANITATION

The Division of General Sanitation was elevated to bureau status in 1982. The Bureau of General Sanitation is composed of two divisions—Waste Disposal and Vector Control.

Division of Vector Control

Vector control activities were designated as a division at the time of other alignments of the Environmental Health Administration.

A joint education program cosponsored by the Alabama Department of Public Health and the Alabama Cooperative Extension Service at Auburn University was held at the Auburn Motor Lodge and Conference Center. This one-day conference attracted 86 participants in the vector control field. The program consisted of several outstanding speakers as well as equipment representatives who demonstrated new vector control products. This annual conference is developing into an excellent forum for distributing information on vector control problems and solutions.

The division expanded its mosquito control surveillance during 1982. Personnel assisted in mosquito surveys of Gulf Shores, Guntersville, Centreville, Chatom, Shelby County, Prattville and Mobile.

The division also aided the Mobile Mosquito Control Division in its efforts to evaluate the scope of Eastern equine encephalitis in the resident bird population. Plans are to expand this surveillance to other areas of the state.

The division has gained experience in a program called timed persistent harassment (TPH) which is a service offered to help control problem bird roosts in an attempt to reduce the potential health hazard of histoplasmosis.

Fly control in poultry and livestock operations continued to be a major problem this year. This division worked with Auburn University to get the Environmental Protection Agency, the U.S. Department of Agriculture, and the Alabama Department of Agriculture and Industries to approve permithria, under the Ciba-Geigy label of Larva dex ®, as a larvacidal. This product has helped tremendously in solving some recurring problems at poultry laying and breeder houses since the insecticide was formulated into the feed.

The Vector Control Division worked with the Houston County Health Department and the Division of Solid and Hazardous Waste to minimize fly and rodent problems following a large warehouse fire in Dothan during the year.

Rat problems plague major metropolitan areas; so the approach to rodent control has many facets. Mobile and Tuscaloosa counties utilized rodenticidal chemicals with inspection and enforcement in their control efforts. Aluminum phosphide, as Phostoxin ®, was registered for urban rat control this past year as a fumigant and was used in Tuscaloosa and Houston counties with good results.

Houston County's typhus control is locally funded with Health Department supervision and incorporates treatment and inspection for rats and fleas

The division gained considerable experience in working with bat infestation in 1982. Personnel of this division trapped three colonies of bats for relocation after bat proofing of buildings had been completed to the satisfaction of the division.

Ticks remained a problem in areas where new housing developments brought people and pets closer to wild areas. The brown dogs tick along with the ornate ticks *Amblyoma* and *Dermacentor* still pose a menace to health. Alabama through work done by the Tennessee Valley Authority has registration on an effective tick repellent under the label of Permanone ®. This repellent has insecticidal properties on mosquitoes and chiggers as well as ticks. This product is applied to the clothing rather than the skin.

Division of Waste Disposal

The Division of Waste Disposal is responsible for on-site sewage disposal in Alabama. The division operates in cooperation with local health departments to enforce the State Board of Health regulations of on-site sewage disposal. Cooperative programs with federal, state and county agencies have continued for subdivision review, school sanitation problems and alternative sewage disposal methods.

This division is responsible for review and approval of innovative alternative sewage disposal methods and of plans for on-site sewage disposal systems for schools and subdivisions. Part of the review process includes field investigations and evaluation of soil conditions for projects for which ground absorption is proposed as the means of sewage disposal.

New environmentalists were given introductory training in subdivision review and approval and in on-site sewage disposal systems through the Basic Environmental Training Course taught in Selma this year. Continuing education

Engineer Larry Speaks explains the operation of an aerobic sewage disposal system to Butler Green and Frank Aldridge, environmentalists.

was provided in the Environmental Health Association chapter meetings and other courses throughout the state. In-service training was also given in soil evaluation and in the use of aerobic and other alternative sewage disposal systems.

The division provides technical advice and assistance to local health department employees, engineers, land surveyors, architects and the general public on sewage disposal problems and solutions.

The extent of the on-site sewage disposal program is evident when one peruses the 1980 census records which show that only 53.2 percent of the housing units in the state are served by public sewers. Therefore more than 680,000 housing units representing over 1.8 million people must dispose of sewage on-site. In addition about 650, or just over one-third, of the schools in Alabama use on-site systems for sewage treatment and disposal.

Subdivision Review Program—The division has three environmentalists working full-time in the subdivision review program. In 1982 the staff reviewed and approved 127 preliminary and 129 final subdivision submittals for a total of 256 separate reviews. Copies of approvals for subdivisions are sent to the appropriate agencies which include local health departments and federal lending or loan guarantee agencies such as the Veterans Administration, the Department of Housing and Urban Development, and the Farmers Home Administration. These agencies cooperate in an effort to maintain good sewage disposal practices in subdivisions. The number of subdivision approvals continued to drop in 1982 due to the sagging economy. Graph 6-1 shows subdivision approval trends since 1958. Table 6-1 gives 1982 subdivision approvals by county.

GRAPH 6-1
SUBDIVISION APPROVALS
1958-1982

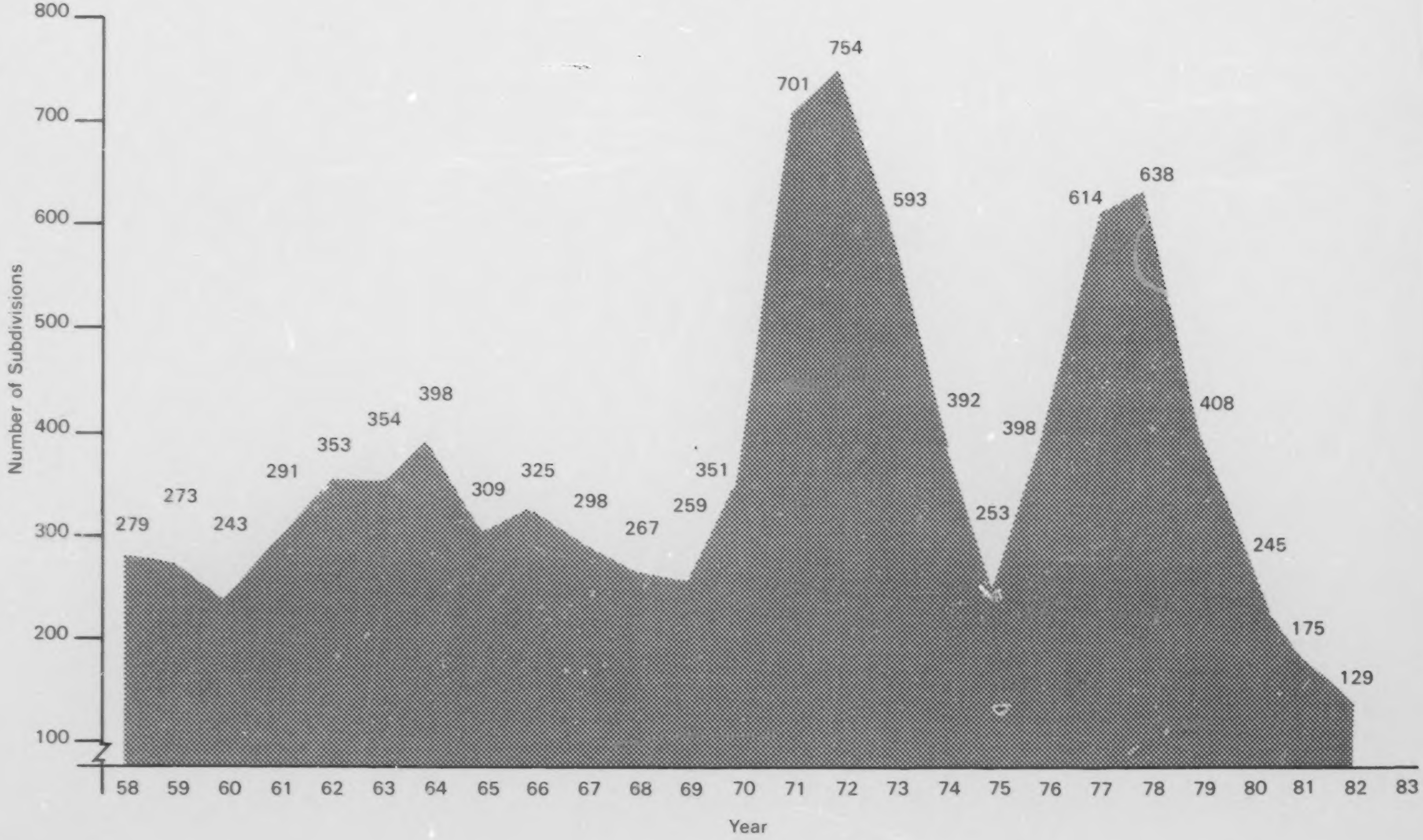
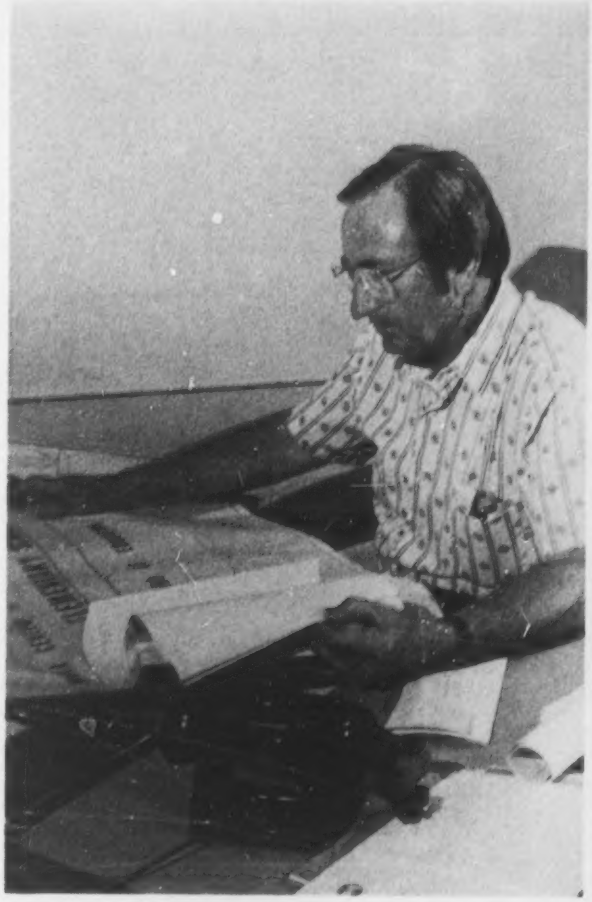


TABLE 6-1
APPROVED SUBDIVISION PLANS
1982

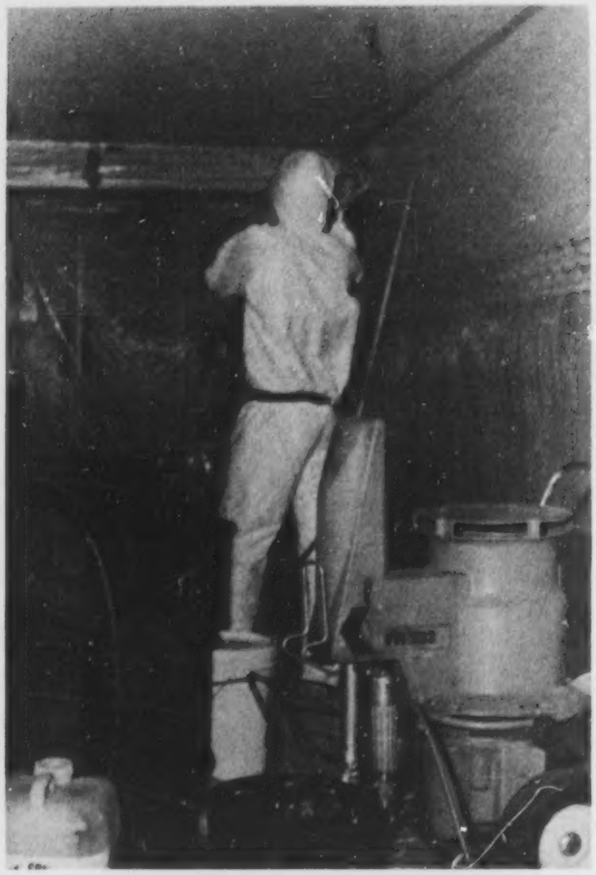
County	Preliminary	Final
PHA I		
Colbert	1	3
Cullman	1	2
Lauderdale	3	3
Limestone	1	0
Madison	5	7
Marion	1	0
Morgan	0	1
Winston	3	1
PHA II		
None		
PHA III		
Blount	1	0
Chilton	1	1
St. Clair	0	1
Shelby	4	2
Walker	4	4
PHA IV		
Calhoun	12	9
Chambers	1	1
Cherokee	3	1
Clay	1	0
DeKalb	1	1
Etowah	3	4
Randolph	5	2
Talladega	2	2
Tallapoosa	4	4
PHA V		
Autauga	4	2
Barbour	1	1
Bullock	3	4
Butler	1	1
Coffee	1	3
Covington	0	1
Dale	5	3
Elmore	5	4
Geneva	1	3
Henry	1	0
Houston	1	2
Lee	1	0
Macon	0	1
Montgomery	0	2
Pike	1	1
PHA VI		
Baldwin	28	17
Conecuh	1	1
Escambia	2	2
Dallas	2	3
Mobile	10	27
Monroe	0	1
Perry	1	1
TOTAL	127	129



Ted Calhoun, environmental supervisor for Etowah County, reviews plans for a school sanitation project.

School Sanitation Program—Final plans for 110 school projects were approved during 1982. Plans are reviewed to ensure that a safe, adequate water supply and a properly sized and functioning sewage disposal system were available. The Division of Waste Disposal was responsible for review of school food service plans from January to November. Sixty sets of plans for food services for 20 school, prison and institutional projects had been reviewed before the Bureau of Inspection reassumed responsibility for reviewing food service plans.

The school project approvals included five new schools. One of these schools was approved with an on-site septic tank and pump dosed effluent disposal field. With 18,000 linear feet of disposal trench, this is the largest such school project in the state. Two new school kitchen/cafeterias were approved with experimental on-site grease trap and effluent disposal fields. Six sewage treatment plants and lagoons were added to correct disposal field failures or to eliminate positive outlets at eight schools. New on-site



Extensive precautions are taken to protect the worker and the environment during the removal of asbestos.

sewage disposal systems were approved to correct disposal field failures or eliminate positive outlets at six schools.

Delays in the release of the Governor's oil lease money and delays due to court actions over asbestos removal slowed the issuance of school plans the last few months of the year. Fifty-seven sets of plans were held over into 1983. The majority of these were preliminary and final plans for projects apparently not acted on due to delays in release of building funds.

The school plan review section reviewed 420 sets of plans. These included 126 schematic plans, 137 preliminary plans, 155 final plans and two revised final plans.

In an effort to reduce unnecessary reviews, 23 school projects were analyzed at an early stage, and the determination was made that further plan submittals and reviews were not required since the projects were served by approved public sewer and water systems and no food service areas were involved. A breakdown of school projects by county is given in Table 6-2.

TABLE 6-2
SCHOOL PROJECTS
1982

County	Approved	Pending
PHA I		
Colbert	4	0
Cullman	5	1
Franklin	1	0
Jackson	3	0
Lauderdale	2	0
Limestone	2	0
Madison	22	3
Marion	1	0
Marshall	1	0
Morgan	5	0
PHA II		
Bibb	1	0
Fayette	1	0
Greene	0	1
Hale	1	0
Lamar	1	1
Pickens	0	1
Tuscaloosa	2	4
PHA III		
Blount	2	1
Jefferson	4	2
St. Clair	2	0
Shelby	3	1
Walker	1	0
PHA IV		
Calhoun	4	3
Chambers	2	1
Clay	2	0
DeKalb	0	1
Etowah	5	1
Tallapoosa	0	1
PHA V		
Autauga	1	0
Barbour	6	2
Covington	1	0
Geneva	1	3
Houston	3	0
Lee	3	1
Macon	0	1
Montgomery	2	1
Pike	2	1
Crenshaw	1	1
Dale	2	0
Elmore	1	1
PHA VI		
Clarke	0	2
Dallas	1	1
Escambia	2	0
Marengo	1	0
Mobile	3	4
Perry	0	2
Washington	3	3

Other Projects—Approvals were issued for one new prison, three institutions, seven recreational areas and eight miscellaneous projects. Plans for seven projects were held over into 1983.

Alternative On-site Sewage Disposal Systems—Although new housing starts continued to decline in 1982, the total number of requests to the division for the use of alternative systems on marginal soils increased by 298 percent over the previous year. A large portion of this increase was probably due to developers trying to utilize lots previously rejected for septic tanks systems and located within approved subdivisions. Use of alternative systems during the year was not confined to the more populous counties but was distributed throughout the state. Table 6-3 gives a breakdown by county of the number of plans for each type unit which the division reviewed. These figures

TABLE 6-3
REVIEW OF PROPOSALS FOR ALTERNATIVE SYSTEMS
1982

Type Unit Treatment								
County	Other*	Septic Tank & Elevated Bed	Chroma-glass	Mound	Multi-flo	Singulair	Brooks Anti-septic	Jet
PHA I								
Colbert					1			
Franklin								1
Jackson	1				1			
Lauderdale	2					1		
Lawrence					2			
Madison	2							
Marion	1							
Morgan					1			
PHA II								
Greene	1							
PHA III								
Blount				1				
St. Clair	1							
Shelby	2		8					
Walker	1							
PHA IV								
Calhoun				2	1	3		
Cherokee					1		2	
Clay			1					
DeKalb					1			
Etowah							1	
Randolph	1							
Tallapoosa	1							
PHA V								
Autauga	2							
Bullock		10						
Butler	1							
Coffee	1							
Elmore	1	5						
Lowndes	1	1		1				
Montgomery		4				1		
PHA VI								
Baldwin	4	17			1			74
Clarke				1				
Dallas	1							
Escambia	1							
Mobile		22						
TOTAL	25	59	9	5	9	5	3	75

*Other—Includes combinations of package treatment plants or septic tanks followed by absorption bed disposal do not account for the reviews made by local health departments. Under Part I of *Regulations Governing On-site Sewage Disposal Systems*, which became effective in February 1982, local health departments review and approve those applications proposing the use of aerobic systems if they comply with NSF (National Sanitation Foundation) Standard 40 and Appendix C of the on-site regulations.

As in 1982, the bureau will continue to offer support to local health department personnel in the review of aerobic treatment system applications. In February 1982 the bureau held a five-day training course to instruct local health department environmentalists on the regulations and the procedures for reviewing plans and specifications for alternative on-site sewage disposal systems.

During the year the bureau reviewed 191 applications for alternative treatment systems. Several distributors of aerobic treatment plants have home units which have been in operation for two years or more. Since the warranties on most of these units are for two years, future years of operation should supply the division with valuable information on maintenance problems which the property owners may experience and on the longevity of the components of the aerobic units. Under the provisions of Appendix C of the on-site regulations, the property owner has the option of servicing his own plant or purchasing a service contract from a distributor. The average owner of aerobic equipment may not know how to service his own system, and he may have sanitation problems if proper maintenance procedures are not followed.

BUREAU OF INSPECTION

The Bureau of Inspection enforces the regulations related to food, lodging and milk. The divisions of this bureau correspond to these responsibilities.

Division of Food Sanitation

General Food Sanitation—Food surveys and evaluations were made in 30 counties by Bureau of Inspection personnel. The average rating score was 78. A statewide food survey and evaluation was made during the summer by the U.S. Food and Drug Administration (FDA). The average rating score of 66.97 resulted from the statewide survey and evaluation.

School surveys were made for seven of the 105 school systems in the state. The average rating score was 86. Survey results for both county food programs and school food service operations contained recommendations for improving sanitation levels in all establishments. Six bureau environmentalists continued to maintain their status of food survey officer as certified by FDA. Technical assistance and guidance were provided to local health units in upgrading local food programs. Food recalls issued by FDA were forwarded from the bureau office to all local health units with instructions for handling recalled food products.

The Bureau of Inspection issued 175 intercounty food permits.

A summary of food surveys are as follows:

County	Average Rating Score
Autauga	84.8
Chambers	66
Coffee	85
Colbert	80.6
Conecuh	86
Coosa	74.94
Covington	83
Cullman	87
Dale	78
DeKalb	84.15
Elmore	77.87
Franklin	78
Geneva	84
Henry	79
Lauderdale	85
Lawrence	80
Lee	74.71
Limestone	77
Lowndes	82
Macon	86.36
Marengo	79
Marion	79.5
Monroe	82.7
Montgomery	81.09
Morgan	72
Perry	61
Russell	83.42
Tallapoosa	72
Wilcox	66
Winston	77

Food manager training courses were conducted in 15 counties. The 610 food service personnel who passed the written examination received certificates of completion. Two of the courses were presented for food service personnel in detention facilities.

Food Sanitation was the subject of one-hour workshops held at school lunchrooms in Guntersville and Eufaula. One hundred food service personnel attended the two workshops.

The Fifteenth Annual Food Sanitation Workshop was held at Troy State University June 28-July 1, 1982. Twenty-nine environmentalists attended this training course.

Contracts with the State Department of Education were made for inspections at summer feeding facilities and for monthly school food service inspections. Local health departments received $24,120 from the State Department of Education for making 804 inspections. Local health departments made 12,223 school inspections during 1982.

Retail Frozen Dessert—From the 1,200 retail frozen dessert establishments in the state, 11,015 samples were collected and analyzed in 1982. The average percent compliance for bacterial standards was 72.5.

Twenty-two instructional courses on the cleaning and operation of retail frozen dessert freezers were conducted by Bureau of Inspection personnel.

Retail freezers were inspected by county environmentalists as a part of the routine establishment inspection. Establishment evaluation is included in annual food surveys.

Seafood Program—During 1982, the State Health Officer issued five orders effecting the opening or closing of oyster growing areas in Mobile Bay. Three of the orders were for closing and opening areas for replanting or relaying of oysters. These actions were coordinated with the Alabama Department of Conservation.

Heavy rains over Alabama during the early and middle of December forced the closing of Alabama's prime oyster growing areas from December 14 through December 21, 1982. All conditionally approved reefs were open for production at the end of the year. During 1982, 263 sea water samples were collected from oyster growing waters in Mobile Bay to assure compliance with State Board of Health standards.

More oysters were produced from Alabama growing waters during the past year than has been produced in the same time frame for several years. Consequently, a large increase in the amount of local oysters were used in Alabama plants. Other oysters that were processed within Alabama plants came from Louisiana, Texas and Mississippi.

During 1982, 218 samples of oysters were taken from processing plants in Alabama. Seventy-four samples, or 34 percent, did not comply with bacteriological standards. This percentage of violations of the bacteriological standards is about the same as that of recent years.

Permits for oyster processing are issued on a yearly basis, from October 1 through September 30. At the end of 1982, 36 oyster processing plants were permitted and were in the Interstate Shellfish Shippers List. All shops were routinely inspected and water samples were collected from shops that have private water supplies.

More people are now active in some phase of oyster production than ever before due mainly to the large number of unemployed in the Bayou La Batre area.

Twenty-one permits were issued for crab meat packing plants during 1982. This is the same number of permits that have been issued in recent years. Many of the plants are small, family-type shops or are seasonal shops and only work during part of the year. Only about nine or ten of the plants operate on a year-round basis.

Starting in October 1982, crab meat samples were being taken with 18 samples being taken between October 1, 1982, and December 31, 1982. The results show a high percentage of above standard samples. Work to correct this problem will continue.

Routine inspections and water supply samples were conducted at each crab meat plant during the season.

Division of Lodging Sanitation

Camp Sanitation Program—The proposed camp sanitation regulations were revised during 1982 for adoption at the local level. The assistant state health officer of Public Health Area IV had requested that the existing regulations be redrafted for adoption by the county boards of health within that area. The DeKalb County Board of Health adopted camp sanitation regulations in 1963 and has made tremendous progress in improving the sanitation level within these facilities since that time. It is anticipated that the other counties within Area IV will adopt camp sanitation reguations during 1983.

There continues to be interest by the Camping Association for uniform statewide camp sanitation regulations to be adopted by the State Board of Health. The experience gained within Area IV during the coming year will provide the necessary information to address more adequately camp sanitation problems through a statewide regulation in the future.

Hotel and Motel Program—At the present time there are 503 hotels and motels permitted for operation. During the last year the Bureau of Inspection issued permits to 546 hotels and motels; but due to closing and name changes, 42 of these hotels are no longer operating.

A total of 1,661 inspections was conducted during the 1982 year. Based on 503 hotels now operating, the average inspection frequency for 1982 was 3.30 per establishment. This number of inspections is less than currently required by the Hotel Regulations, but an improvement over the 2.91 average inspections of 1981. Regulations require that each hotel or motel be inspected once each quarter.

Jail and Prison Program—Alabama currently has nine major prisons, 18 work release facilities, one employee housing facility and one food processing plant. During 1982 95 inspections were conducted in the major prison facilities. A food survey was conducted during January and February of 1982. The average score of these facilities was 53. In October and November of 1982, a second food survey was conducted. An average rating score of 77 was earned at that time.

Currently there are 246 jails located within Alabama. Local health department environmentalists conducted a total of 1,149 inspections at these county and city confinement facilities. At the request of the assistant state health officers for public health areas IV and V respectively, this office inspected and reported on the conditions of the Calhoun County Jail and the Lowndes County Jail.

Division of Milk Sanitation

Milk and Frozen Dessert Sanitation—During 1981 the administration of the Grade A Milk and Frozen Dessert Sanitation Program for all counties, except Jefferson and Mobile, was centralized under the Bureau of Inspection. The reasons for centralizing the program were to obtain uniformity in inspection and enforcement throughout the state and to reduce the cost. The decentralized program cost $752,154 to administer in 1981. The projected cost of the Milk and Frozen Dessert Program for fiscal year 1982 was $547,398; however the actual cost was only $460,990, for a savings of $291,164 from the 1981 cost.

A milk and food specialist with the U.S. Food and Drug Administration made an evaluation of the total Grade A Milk Program in Alabama during 1982. The report was complimentary in all respects and contained only two recommendations for improving the program. These were to adopt the 1978 milk ordinance and to provide more money for out-of-state travel so that staff can attend conferences of Interstate Milk Shippers and seminars for milk survey officers.

At the end of 1982 there were 417 producer dairies, 30 milk and frozen dessert plants, and four single-service container plants located in Alabama. Seventy-two permits were issued to out-of-state processing plants, and 70 bulk milk haulers were permitted.

Personnel of the Division of Milk Sanitation made inspections of 4,053 dairy farms, 185 milk and frozen dessert plants, 26 distribution stations, 38 single-service container plants, 68 delivery vehicles for accuracy of temperature, and 37 bulk haulers.

Plans were reviewed for 17 new or remodeled barns and for equipment changes at 11 dairies.

Mastitis checks using the California Mastitis Test Kit were conducted on 1,988 cows representing 26 herds. Individual quarter samples collected from cows and submitted to the state laboratory for identification of organism and sensitivity totaled 550.

Of the 3,909 samples of raw milk collected at the farm, 547 exceeded the limit for the Wisconsin Mastitis Test and 279 exceeded the Direct Microscopic Cell Count standards. In addition 269 exceeded standard plate count criteria; 11 were positive for growth inhibitors; and five contained added water. Of these samples 505 violated established standards.

Of the 887 commingled raw milk samples, 112 exceeded established standards. Eight were positive for growth inhibitors, and 103 had unacceptable bacteria counts. One violated freezing point regulations.

Results of laboratory examination for 5,604 pasteurized milk, milk product and frozen dessert samples collected show that 432 violated coliform standards and 243 had unacceptable bacteria counts. One sample was positive for phosphatase, and five were positive for growth inhibitors.

Fifty-six permit suspensions resulted from 239 official notices for violation of bacterial, chemical or sanitation standards.

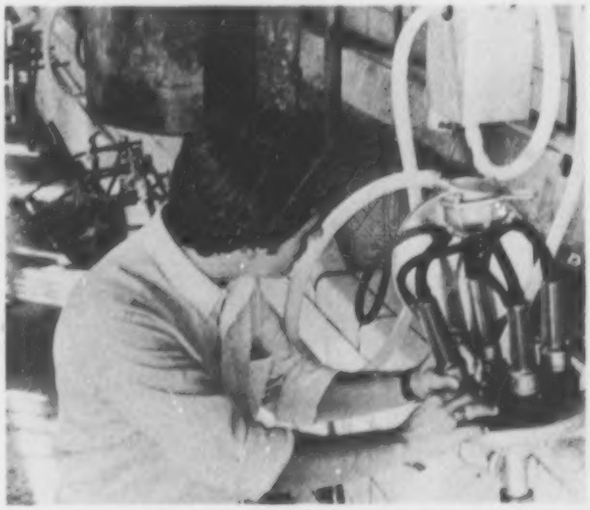
BUREAU OF RADIOLOGICAL HEALTH

The Bureau of Radiological Health is legally responsible for regulating all sources of ionizing radiation except reactors. In addition the bureau in cooperation with other state agencies maintains an emergency response capability unique for ionizing radiation.

Radioactive Materials—The bureau issued 415 specific licenses to use radioactive materials which were active at the end of 1982. Table 6-4 lists the number of the various types of licenses. During 1982, 25 new licenses were issued, and 299 amendments were made to existing licenses.

TABLE 6-4
RADIOACTIVE MATERIAL LICENSES
1982

Medical	126
Academic	35
Industrial	207
Civil Defense	2
Other	45
TOTAL	415



An environmentalist inspects an automatic milking machine to determine that the milk is properly handled to avoid contamination.

The bureau conducted 103 inspections of these licenses in 1982. Two incidents involving radioactive materials were reported to the bureau during the year.

X-ray Equipment—Table 6-5 gives the total inventory of X-ray equipment in Alabama, excluding Jefferson County

TABLE 6-5
REGISTERED X-RAY MACHINES
1982

Dental	1,538
Physicians and Clinics	711
Hospitals	764
Chiropractic	157
Veterinarians	112
Podiatrists	10
Industrial	100
TOTAL	3,392

which conducts its own X-ray programs. The inspection data for these units are reported in Table 6-6. Noncompliance was recorded for 27 percent of the facilities and 8 percent of the machines.

TABLE 6-6
X-RAY MACHINES INSPECTION DATA
1982

Dental	438
Physicians and Clinics	158
Hospitals	197
Chiropractic	32
Veterinarians	30
Podiatrists	5
Industrial	0
TOTAL	860

Environmental Monitoring and Nuclear Power—During 1982 the bureau committed a major portion of its time to revising, updating and testing the State Radiation Emergency Plan to meet new federal criteria. Public meetings and an exercise at the Browns Ferry Nuclear Plant were included. As a result of the new criteria, major equipment was purchased in 1982.

OTHER UNITS

Five Health Department divisions which were transferred to the new Department of Environmental Management were under the Environmental Health Administration for the first of 1982. Reports of their activities for the nine months follow.

Alabama Air Pollution Control Commission

Attainment Status—In conformity with the 1977 Clean Air Act, the Air Pollution Control Commission identified the areas which violated the National Ambient Air Quality Standards for five major pollutants. More than half of the original nonattainment areas have been reclassified to indicate improved air quality. Table 6-7 gives the areas in

TABLE 6-7
NONATTAINMENT DESIGNATIONS—ALABAMA
1977 and 1982

County	1977	1982
Mobile		
Ozone	NA	NA
Total Suspended Particulates—State Docks Area	NA/P	NA/P
Northern Portion of County	NA/S	A
Russell		
Ozone—Phenix City/Columbus, Georgia Area	NA	A
Jefferson		
Ozone	NA	NA
Total Suspended Particulates		
Fairfield Area	NA/P	NA/S
Irondale and Bessemer Areas	NA/P	U
Homewood Area and Fultondale, Robinwood, and East Lake Areas	NA/P	A
Leeds	NA/P	NA/P
Central Metropolitan Birmingham Area	NA/P	NA/P
Etowah		
Total Suspended Particulates—Gadsden Area	NA/P	NA/P
Ozone	A	NA
Lauderdale		
Total Suspended Particulates—Florence Area	NA/S	A
Lauderdale/Colbert		
Sulfur Dioxide—Adjoining portions in immediate vicinity of Tennessee Valley Authority's Colbert County Steam Plant	NA/S	NA/S
Morgan		
Total Suspended Particulates—Decatur Area	NA/S	A
Ozone	NA	A
Madison		
Ozone—Huntsville Area	NA	A
Jackson		
Total Suspended Particulates—Tennessee Valley Authority's Widows Creek Steam Plant Area	NA/P	A
Sulfur Dioxide	NA/P	NA/P

NA/P—Nonattainment, primary standard
NA/S—Nonattainment, secondary standard
A—Attainment
U—Unclassified

nine counties which violated standards and the pollutants. Nonattainment designations for ozone were on a countywide basis, but total suspended particulates and sulfur dioxide were designated for sub-county tracts. Primary, or health related, standards and secondary, or welfare related, standards were indicated. Table 6-7 also indicates the improvements.

Since the ozone monitoring network was established in 1980 sixteen counties have changed from unclassified to attainment because data indicated no ozone standard violations. They are Autauga, Bibb, Conecuh, DeKalb, Elmore, Escambia, Fayette, Jackson, Lamar, Limestone, Lowndes, Marion, Marshall, Monroe, Montgomery and Tuscaloosa.

In June 1982 the Air Pollution Control Commission requested that the Environmental Protection Agency redesignate the following counties from unclassified to attainment for ozone: Baldwin, Barbour, Bullock, Butler, Chambers, Chilton, Choctaw, Clarke, Coffee, Coosa, Covington, Crenshaw, Dale, Dallas, Geneva, Greene, Hale, Henry, Houston, Lee, Macon, Marengo, Perry, Pickens, Pike, Sumter, Tallapoosa, Washington and Wilcox. Data were also submitted for the redesignation of Russell County from nonattainment to attainment for ozone. Approval of this request has not been received.

In March 1982 it was requested that Etowah County be redesignated from unclassified to nonattainment for ozone.

Odor Survey—Due to a recurring, occasionally severe odor problem in the Tuscaloosa area, an intensive study is being conducted to identify the sources and develop corrective measures.

The problem appears to be concentrated in an area on the Black Warrior River north of Tuscaloosa, which is the location of several chemical plants. The variety of chemicals used by each facility and the complex nature of chemical reactions make determining the origin of the odor difficult. Since variable meteorological conditions—wind speed and direction, temperature, and stagnant atmospheric conditions—directly affect detection and control, odor patrols respond to advisory opinions of meteorologists and to resident complaints, such as watery eyes and irritated noses and throats.

Acid Rain—With the increased interest in acid rain, the Air Pollution Control Commission established a monitoring site in Tallassee and began collecting samples in 1981. The Environmental and Monitoring and Systems Laboratory in Research Triangle Park, North Carolina, will analyze all samples for chemical composition. It will take at least a full year to determine baseline data. However initial indications are that Alabama does not have as extensive a problem as some Northern states.

Computer Developments—The computer terminal operated by the Alabama Air Pollution Control Commission has successfully communicated with the Environmental Protection Agency's IBM computer at the National Computer Center at Research Triangle Park, North Carolina. Preparations have been underway to effect the use of EPA's Air Quality Data Handling System (AQDHS), which is presently being run on the Univac computer at the University of Alabama in Huntsville. Transferring to the IBM will provide access to the latest version of AQDHS, as well as facilitate submittal of data to EPA. In addition this computer will allow access to the latest air quality models in use by EPA.

New Computer Model—Computer modeling is required prior to construction of certain major sources of air pollution to determine the impact of emissions on existing air quality.

A multi-source dispersion model termed COMPTER developed by the staff and submitted to EPA for evaluation and inclusion in the *Guideline on Air Quality Models* was made available to the public during March 1982. COMPTER allows more efficient analysis of source impact than other currently available models.

Regulatory Revisions—In 1982 the public were permitted to express their opinions at several hearings on proposed changes to state air pollution control regulations. Subsequently the following amendments were adopted.

"Offset" revisions consisted of changing the definition of source to mean an entire plant, as opposed to an individual piece of process equipment within the plant, for purposes of determining if a source change is a modification and subject to new source review. Under the new definition if a plant increases emissions at one piece of process equipment but reduces emissions by the same amount at another piece of process equipment, there would be no net increase in emissions and therefore no modification to the source.

Alabama, like other states, had until October 31, 1982, to devise a **lead plan** to demonstrate attainment of the 1978 EPA national ambient standard for lead.

Motor vehicles account for approximately 88 percent of ambient lead concentrations. Stationary industries which emit lead are usually involved in mining and production of lead and lead products.

AAPCC monitored for ambient concentration of lead at all industries which have the potential for emitting this pollutant. The study concluded that only two areas—Troy and Leeds, sites of secondary lead smelters—have the potential to exceed ambient limits for lead. AAPCC adopted regulations this year for additional controls of fugitive emissions from these industrial sources.

Due to the potential impact of motor vehicles in the metropolitan area of Birmingham, existing and projected levels of lead were assessed. The study indicated no violations of the ambient standard for lead. Computer modeling projects that the continued reduction of lead in gasoline will assure maintenance of the standard.

Jefferson County control strategy to attain and maintain air quality standards for particulate matter was discussed at public hearings in August 1982. The initial control regulations developed and adopted in 1978 and

1979 for portions of Jefferson County were stayed by Fifth Circuit Court because of a procedural error by EPA in making the nonattainment designations. Consequently the designation and control strategy revision processes had to be repeated. A review indicated that with minor modifications the 1978-79 control plan is still viable. However EPA has questioned the methodology used; so negotiations are underway to develop an acceptable plan.

Proposed revisions of the **"bubble"** or controlled trading regulations authorize approval of emission trades without case-by-case federal SIP (State Implementation Plan) review. Certain criteria must be met. The revisions were adopted to provide more flexibility in emission trades allowing innovative control technology if air quality levels are maintained.

The averaging time for **volatile organic compound** (VOC) emission limits that are applicable to rubber tire manufacturing plants was changed from annual to monthly in a revision adopted in 1982.

A revision to the definition of VOC which removed certain nonreactive organic compounds from the definition was adopted to make the definition consistent with recent changes in the federal definition.

Proposed revisions which changed the averaging time for *de minimis* **nitrogen dioxide levels** from new sources from an annual to a 24-hour average were adopted to make this section of the *Rules and Regulations* consistent with changes in the federal Prevention of Significant Deterioration regulations.

Environmental Health Administration Laboratory

During 1982 the Environmental Health Administration Laboratory provided chemical analytical support to the divisions of the Environmental Health Administration, the Alabama Water Improvement Commission and the Alabama Air Pollution Control Commission. Also on a case-by-case basis the laboratory provided services to county and local health agencies.

Table 6-8 summarizes the monthly activities of the laboratory and the agencies requesting services. From

TABLE 6-8
ENVIRONMENTAL HEALTH LABORATORY WORK LOAD
1982

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	TOTAL
Air Pollution										
Number of Samples	10	1	6	4	7	5	3	6	10	52
Number of Determinations	17	3	18	8	21	15	9	18	30	139
Total Work Time Units	399	75	450	190	525	375	225	450	804	3,493
Public Water Supplies										
Number of Samples	72	175	261	111	104	203	166	282	115	1,489
Number of Determinations	250	1,090	1,333	416	637	1,097	1,176	1,408	776	8,183
Total Work Time Units	4,313	16,189	24,341	8,013	9,876	20,153	17,008	25,907	12,043	137,843
Radiological Health										
Number of Samples	67	31	30	62	40	36	59	46	16	387
Number of Determinations	161	45	46	182	88	110	240	98	100	1,070
Total Work Time Units	7,730	2,000	346	6,856	3,908	2,874	4,040	2,378	2,830	32,962
Water Improvement Commission										
Number of Samples	221	295	537	453	432	407	455	440	800	4,040
Number of Determinations	864	780	1,490	1,583	1,454	1,321	1,521	982	2,157	12,152
Total Work Time Units	15,138	9,663	18,764	18,678	30,505	21,991	20,877	15,261	28,834	179,711
Inspection & General Sanitation										
Number of Samples			8							8
Number of Determinations			24							24
Total Work Time Units			256							256
Solid & Hazardous Waste										
Number of Samples	177	175	190	86	278	271	333	360	352	2,222
Number of Determinations	1,774	1,367	1,168	760	1,773	986	1,850	1,411	1,887	12,976
Total Work Time Units	27,393	23,861	20,730	9,232	26,031	11,943	28,414	28,915	38,848	215,367
TOTAL SAMPLES	547	677	1,032	716	861	922	1,016	1,134	1,293	8,198
TOTAL DETERMINATIONS	3,066	3,285	4,079	2,949	3,973	3,529	4,796	3,917	4,950	34,544
TOTAL WORK TIME UNITS	54,973	51,788	64,887	42,969	70,845	57,336	70,564	72,911	83,359	569,632

January through September 1982, the laboratory received 8,198 samples. These samples required 34,544 determinations and a measured output of 569,632 work time units. The largest work load was performed for the Division of Solid and Hazardous Waste followed by the Alabama Water Improvement Commission and Public Water Supply. Overall the work load for this period in 1982 was 6 percent higher than 1981.

Analytical Capabilities—General laboratory capabilities are listed in Table 6-9. This spectrum of analytical capabilities has been expanded to include the Priority Pollutants, and it is felt that this expansion will meet the needs of the laboratory's consumers for the next three to five years.

Presently the laboratory is expecting the delivery of a TOX Analyzer (Total Organic Halogen Analyzer). With present equipment and the addition of the TOX analyzer the laboratory will be able to address all aspects of present day environmental mandates.

Quality Control—The laboratory's effort in the Safe Drinking Water Act certification program has continued at the 1978 level. All of the analytical problems the laboratory encountered with the Safe Drinking Water Act performance radiation sample were corrected in 1982.

Approximately 10 percent of the routine samples received were analyzed in duplicate and 5 percent of these samples were spiked for the metals and the nitrogen series. The above programs were supplemented by known references being analyzed with each group of samples as a check on the validity of the standard curves and the generated data.

TABLE 6-9
ENVIRONMENTAL HEALTH ADMINISTRATION LABORATORY PARAMETERS
1982

ORGANICS

I. Organochlorines
  1. Aldrin
  2. BHC (Lindane)
  3. DDD (o,p'; p,p')
  4. DDE (o,p'; p,p')
  5. DDT (o,p'; p,p')
  6. Chlordane
  7. Heptachlor
  8. Heptachlor Epoxide
  9. Methoxychlor
  10. Mirex
  11. Toxaphene
  12. PCB's (1016, 1254, 1260, 1262, 1248, 1232, 1242, 1221)
  13. Dieldrin
  14. Endrin
  15. 2,4-D
  16. 2,4,5-TP

II. Organophosphates
  1. Diazinon
  2. Methyl Parathion
  3. Ethyl Parathion
  4. Malathion
  5. Ethion
  6. Malathion

III. Volatile Organics
  1. Chloroform
  2. Bromoform
  3. Bromodichloromethane
  4. Chlorodibromomethane
  5. 1,2 Dichloroethane
  6. 1,1,1 Trichloroethane
  7. 1,1,2 Trichloroethylene
  8. Carbon tetrachloride
  9. 1,1,2,2 Tetrachloroethylene

INORGANICS

Minerals
p^H
Alkalinity
Sulfide
Oil and Grease
Chloride
Fluoride
Turbidity
Color
Cyanide
Phenol
Hardness
Total Suspended Solids
Total Dissolved Solids
Total Solids
Total Organic Carbon
Acidity
Specific Conductance
Sulfates
Carbon Dioxide

Metals
Al
Ag
Ca
As
Cd
Cr-T
Cr-VI
Cu
Fe
Mn
Ni
Pb
Zn
Hg
Ba
Se
Na
Mg

Nutrients
1. Nitrate—Nitrite
2. Ammonia—Nitrogen
3. Organic—Nitrogen
4. Total Phosphates
5. Ortho—Phosphates

Demands
1. Biochemical Oxygen Demand
2. Chemical Oxygen Demand

Air
1. Air Sulfates
2. Air Stacks
3. Air Filter Lead

RADIATION

Gross Alpha
1. Air
2. Water
3. Soil
4. Vegetation

Gross Beta
1. Air
2. Water
3. Soil
4. Vegetation

Gamma
Bi—214
Ba—140
Co—60
Cs—134
Cs—137
Ce—144
I—131
K—40
Ru—106
Th—232
Zn—65
Zr-Nb—95

Liquid Scintillation
Tritium

Specific Alpha
1. Ra—226-228

Specific Beta
1. Sr—89 & 90
   a. Milk
   b. Water
   c. Soil
   d. Vegetation

Public Water Supply Program

The Division of Public Water Supplies under the Environmental Health Administration was a part of the State Health Department from January through September 1982. On October 1, this office was transferred by state law into the newly created Alabama Department of Environmental Management. The Alabama Safe Drinking Water Act and its rules and regulations including that of the Water and Wastewater Certification Board and Alabama Water Well Standards Board were transferred intact. During the first nine months of this year this division continued its activities in inspecting water systems, collecting chemical samples, answering complaints, meeting with various professional and municipal groups, and carrying out the rules and regulations of this office.

A public water supply by definition is a water system providing drinking water to 25 or more people at least 60 days per year. This category is also broken down into noncommunity and community public water supplies. Noncommuity public water supplies are those systems without full-time residents while community water systems pertain to water systems with full-time residents. An example of a noncommunity water supply would be a travel park, fishing camp or school. Mobile home parks and municipal type systems are examples of community systems.

At present there are 688 community systems with 88 of these being mobile home parks. Of the 504 noncommunity systems, 103 are either schools or day care centers; 98 are industries; and 133 are motels and restaurants. The larger community systems have been under the authority of the Health Department for the past 60 years, and a continuing program promoting good operation of the systems has resulted in the majority of these type systems being in full compliance for certification and operation. The small community systems, primarily trailer parks, continue to be a problem since many of them do not continually chlorinate. This was one of the primary goals for this year, and all of these facilities have been contacted and continual chlorination requested. Many have complied with this requirement and are producing satisfactory water.

Water System Construction—Permits issued for the construction of water projects in the period January 1, 1982, through September 30, 1982, reflect an increase in overall construction even with the downturn in the economy. Only 4,486 new customers were added through major construction during this time which more than favorably compare with the 5,993 new customers last year since only three-fourths of the year is reflected. Again the 467 miles of water main installed is well ahead of 75 percent of the 567 miles installed in 1981. Projecting forward the $43 million spent on these projects in only nine months would place the overall expenditures for a full year well in excess of the $47.5 million spent in 1981 or $49 million spent in 1980. During these nine months eight new systems were placed into operation: Franklin, Pollard, Nectar, Randolph County, Sycamore, Eldridge and Providence. Four of these nine purchase water, and the other five are systems with separate groundwater supplies.

In 1977 more than 1,400 subdivisions were reviewed for approval by this office. This number has continued to decline to 1,000 in 1978, 419 in 1979, and 297 in 1980. This reduction continued in 1981 with 212 subdivisions, and only 114 subdivisions were reviewed during the nine months of 1982.

Water Division Employees—The Water Division staff during this portion of 1982 consisted of seven public health engineers, three environmentalists, five stenographers, two clerk typists and one clerk. During this brief period one senior engineer that had completed his master's degree left for a better paying job; two stenographers and one clerk typist resigned.

Inspection and Surveillance—It is the goal of this program to inspect all community and noncommunity water supplies at least once during the year, to perform on-site inspections, and to evaluate treatment. Those larger systems especially with surface treatment plants are normally visited twice, and problem areas receive as many visits as time allows. During these visits the operators and responsible persons are contacted, and the discussion of the system covers all items necessary to correct deficiencies. A follow-up letter addresses these problems with suggestions or requirements to provide better operation. During nine months 337 man days were used for on-site evaluations for water systems. These are somewhat under the number of man days of inspection for last year.

Water Quality Monitoring and Enforcement—Under state and federal law all public water systems must be monitored to determine if bacteriological contamination exists in a water supply in excess of the maximum contaminant level established. Each water system under the present state law is required to submit bacteriological samples monthly. The number of samples required to be submitted from each public water system is determined by the population being served but in no case can it be less than two samples. The number of samples required from a noncommunity supply is only two per month regardless of the number of people served.

To determine if a system is in compliance, the results of the monthly samples are compared with the MCL levels established in the rules and regulations. If the system is not in compliance with the monitoring requirements or fails to comply with the MCL for coliform bacteria, the water system is required to give public notification of this fact as well as take corrective action. The bacteriological analyses are performed by certified laboratories, and the vast majority of these samples are tested by the state health laboratories. The remainder of the samples are performed by certified water system bacteriological laboratories.

A total of 39 community systems was in violation of the bacteriological MCL in this time period. These represented 49 violations which then created 88 enforcement actions such as certified letters and resulted in 49 public notifications from these community supplies. Eighty-six noncommunity systems created 125 bacteriological MCL violations. The 168 enforcement actions resulted in 120 public notifications.

In addition to the requirements that a system have a satisfactory water quality and remain below maximum contaminant levels, monitoring and reporting requirements are necessary to ensure that the samples are being collected properly and that the reports are being furnished to this office. Forty-five community water systems incurred 129 monitoring violations. Eighty-four enforcement actions were taken on these systems which in turn resulted in 108 public notifications. Ninety-eight noncommunity systems created 326 monitoring violations. Almost 350 enforcement actions were required to obtain 303 public notifications. As can easily be seen, most of the violations and the majority of the enforcement activity involve noncommunity systems. Both the bacteriological MCL violations and monitoring violations have chronic violators which consistently failed to comply with the existing regulations.

Turbidity is a measure of the clarity of the water. A water supply would be susceptible to a bacteriological contamination with a high turbidity. Since disinfection procedure is greatly hindered, the bacteria could be protected inside these particles of mud and create a waterborne outbreak unless these particles are properly removed. State law requires turbidity to be monitored on a daily basis for all systems—community and noncommunity—utilizing a surface water supply. Groundwater systems can experience turbidity problems because of the limestone aquifers especially found in North Alabama. Alabama is one of the few states in the nation with a groundwater turbidity level standard.

Certain select groundwater systems are required to monitor for turbidity because of known problems. Two community systems resulted in 10 MCL violations during these nine months. Only two enforcement actions were required for the ten notifications to be generated. Nine of these violations came from one system which is reluctant to take proper steps to obtain a satisfactory source of supply. Eight noncommunity systems were in violation of the turbidity standards and created 13 separate violations. Thirteen enforcement actions were taken, and 13 notifications were carried out. Only two community systems created monitoring violations for failure to report turbidity levels. Two enforcement actions were taken, and one public notification was made. One noncommunity system created two monitoring violations for turbidity, and two enforcement actions resulted in two public notifications.

Although there are a few systems which have a high natural fluoride level which exceeds the MCL, these systems are not reported as exceeding a chemical MCL if samples are not collected during the year. Only two chemical MCL violations were experienced during these nine months. One of these two systems was in violation of the new total trihalomethane standard which has recently been incorporated into the regulations of the state. These regulations deal with a chemical compound resulting from chlorination of heavy organic laden raw water from a surface source. In turn a series of chlorinated organics, primarily chloroform, which are known to be carcinogenic are created. Although this one violator is a major system serving several thousand people, due to the size and complexity of the system an immediate change of a water treatment could not be made to correct this problem. It is expected that this trihalomethane problem will be solved before the end of 1983.

It should be noted that only two community systems which have a population of greater than 10,000 had a bacteriological MCL violation during this time frame. No system in this population category had a monitoring or reporting violation. The majority of the larger systems continue to be operated in a very satisfactory manner and strive for continued improvement in their quality and their operation.

Model States Information System—During 1982 the Model States Information System was utilized for inventory purposes for the public water supplies in the state and to prepare the tape required for the federal report for fiscal year 1982. The Mohawk Computer purchased for the Public Water Supplies office was moved from Health Data Systems to this office, and entry of inventory data was initiated from the Public Water Supplies office via the Mohawk equipment. The installation of the Mohawk equipment allows for inventory data and sample results to be entered into the state's computer system for the MSIS programs from the Public Water Supplies office and also allows for printing of reports to be done in the Public Water Supplies office.

During fiscal year 1983 plans are for compliance reports to be run for each month and the total annual report to be prepared by computer. This will be done through programming support from Health Data Systems during the year. In addition a study is currently being made on the expansion of the Mohawk equipment to include an additional operator station for data entry, word processing, and the possible preparation and support of programs for calculators involved in the planning of public water supplies.

Training and Certification—The rules and regulations of the Certification Board were modified during fiscal year 1981 and have been transferred over to the Water Supply Program under the Department of Environmental Management along with full operating authority of this program for water and wastewater operators. During these nine months, activities regarding receiving applications and issuing certificates were handled through the secretary of the Board of Certification. In support of this program. more than 400 applications were reviewed for the water certification examination. In March, 117 of 200 water operators taking the examination passed, and in August, 93 of 140 water works operators passed the examination. This shows an overall passage at the rate of 62 percent for the 210 recently certified operators. The annual Short Course School sponsored by this office, AWPCA, the Water Improvement Commission and both major universities was held. More than 400 people, primarily operators and managers, attended this short course school. In addition two full-time instructors were assisted in scheduling classes by this office and taught approximately 55 day classes in various cities throughout the state.

Water Well Standards Board—During the 1982 fiscal year 149 individuals were granted licenses to construct water wells in Alabama. Of this total, 120 were from Alabama, seven from Georgia, eight from Florida, ten from Mississippi, three from Tennessee and one from Texas. Approximately 1,100 private water wells were constructed during this period, a decrease of 27 percent from the previous year. With a reduced staff, the Alabama Water Well Standards Board has visited 40 counties and inspected 234 water wells, averaging six water wells per county. Also during this period seven complaints were investigated, and two individuals were denied licenses to construct water wells in the state. Three warrants were obtained for the arrest of unlicensed drillers; however none of the arrests went to court.

Division of Solid and Hazardous Waste

On October 1, 1982, the Division of Solid and Hazardous Waste was transferred to the Alabama Department of Environmental Management as the Land Program. Therefore this report covers activities in solid and hazardous waste as separate sections for the first nine months of 1982.

Solid Waste Management—Activities for this particular area include site evaluations, site permitting, continuance of the Resource Conservation and Recovery Act Open Dump Inventory, and complaint investigations. The following tables with added explanations present an overall summary of the existing sanitary landfills, results of the evaluations and county collection systems. The data also present the previous year's results for comparison.

HOUSEHOLD WASTE ONLY
ALL OTHER ITEMS SUCH AS:
METAL SCRAP - FURNITURE - MATTRESSES-
BRUSH - APPLIANCES - BUILDING MATERIALS
MUST BE CARRIED TO LANDFILL

Many county health departments are advocating the elimination of roadside collection of solid waste and the conversion to door-to-door collection.

TABLE 6-10
SOLID WASTE SANITARY LANDFILL EVALUATIONS
1981 & 1982

	1981		1982*		1982**	
	Number	Percent	Number	Percent	Number	Percent
Total Sanitary Landfills	129	—	128	—	128	—
Total Inspections	306	—	244	—	191	—
Average Inspections Per Landfill	2.4	—	1.9	—	1.9	—
Substandard at Some Time during the Year	24	19	40	31	29	23
Substandard More Than Once during the Year	6	5	11	9	8	6

*Full Year
**For First Nine Months Only

The number of sanitary landfills remained relatively constant since some were closed out and others were permitted. Inspections have decreased in recent years because of the excessive time required to maintain the open dump inventory and the decrease in personnel and funding. Each site should be inspected a minimum of four times a year. The sites which are occasionally substandard and chronically substandard increased sharply in 1982. Tighter economic pressures on the operating agencies, lack of state surveillance and delay in legal enforcement contributed to the substandard operations. The 1969 solid waste law needs to be revised to reduce confusion of interpretation and to delineate responsibilities.

TABLE 6-11
SOLID WASTE PERMITTING STATISTICS
1982*

Requests for Sanitary Landfill Site Approvals	31
Requests Denied Because of Poor Geology, Etc.	13
Permits Issued	4
Applications Withdrawn	5
Permits Pending Plans or Other	9

*For Nine Months

The final 41 sites under the RCRA Open Dump Inventory were completed during this period. Two sites were reported to the Bureau of Census as open dumps. The 142 sites investigated under this program include all candidate active and closed sanitary landfills. Of the 101 sites completed in 1980 and 1981, 16 were reported as open dumps, and six of those were removed from the dump category early in 1982.

This section also conducted surveillance over nonputrescible and nonhazardous trash disposal sites to the best of its ability. Sixty of these sites were permitted during this period. An estimated 160 sites remain. Such sites are not major environmental concerns except that they may burn or present other nuisance problems.

Complaints are normally investigated within five days of receipt. These are often roadside or other unauthorized dumping of household or business wastes. An update of an old attorney general's opinion delineating responsibility for clean up has been requested and is pending.

One county without an organized collection system adopted a combination system. Otherwise the rural solid waste collection systems remained the same as 1981.

TABLE 6-12
COUNTY SOLID WASTE COLLECTION SYSTEMS
1982*

House-to-House or Mailbox	48
Bulk Container System	15
Combination of Both	4

*For Nine Months

However, particularly in the last half of 1982, an increasing number of counties are allowing their waste collection systems to deteriorate. The increasing financial crunch, evidenced by increasing equipment and operating costs, and the increasing problems with fee collection are contributing factors in the deterioration. Because of the 1976 State Supreme Court decision, counties cannot be required to offer these services. The only incentive for maintaining a collection system is the countering cost of cleaning up roadsides and other dumping areas.

Hazardous Waste—The hazardous waste program is continually changing to meet the needs of the general public. Attempts were made in both the regular and special legislative sessions to bring state statutes fully in line with RCRA, thereby enabling Alabama to qualify for Phase II authorization. Unfortunately the legislature failed to pass the proposals, thus negating any chances the agency had for receiving Phase II authorization during 1982.

The state regulations governing hazardous waste management were updated to ensure equivalence with the federal regulations, thus allowing state enforcement activities for Phase I to continue. Attempts will again be made in the upcoming legislative session to modify the State Hazardous Waste Management Act. In addition the agency will seek both Phase II and final authorization from the Environmental Protection Agency for the hazardous waste program.

The agency, in conjunction with EPA, called for ten Part B storage permit applications from industry during March 1982. These original applications have been received, reviewed and returned to the companies for additional information. During the fall six additional Part B's were called for and are now under preparation by the selected companies. Of the original ten permits called for, it is anticipated that seven permits will be issued during the summer of 1983. The remaining permits called in 1982 will be issued during fiscal year 1983.

It is anticipated that it will take approximately eight years to permit all the treatment storage and disposal facilities located in Alabama. The first Part B's called were all storage facilities. The second call was for storage and incineration facilities. Beginning in early 1983 facilities with surface impoundments and land disposal operations will be asked to submit Part B applications. It should be noted that approximately 100 companies were issued transporter permits during 1982. In addition applications are being processed on an additional 75 transporter applications at this time.

The agency conducts interim status standards inspection and monitoring inspections of hazardous waste facilities. Interim status standards inspections are conducted in order to ensure that facilities are meeting all operating and administration requirements specified by the State Hazardous Waste Management Regulations. All 40 major facilities in the state are inspected annually. In addition approximately 350 inspections were conducted on minor facilities, generators and hazardous waste transporters in 1982.

There are 39 facilities in the state which are required to meet groundwater monitoring criteria. Any facility which treats, stores or disposes of hazardous waste in surface impoundments or landfills is required to meet stringent groundwater monitoring requirements. All 39 facilities have groundwater monitoring plans in operation. Quarterly reports are being submitted by industry to this agency. In addition the agency conducted compliance monitoring inspections on all 39 facilities.

Hazardous waste personnel routinely inspect abandoned or uncontrolled hazardous waste sites. These sites originated primarily through the superfund notification requirement. In addition many sites are reported through citizen complaints. Active inspections and investigations were conducted on 76 sites during 1982. As a result of agency activities in this area, several sites were cleaned up during the past year. Also as a result of investigation activities, three state sites were listed under the National Priority List as superfund candidates.

The information contained in this report for hazardous waste program activities are summarized in Table 6-13.

TABLE 6-13
HAZARDOUS WASTE ACTIVITIES
1982

Permit Applications Called	10
Permit Applications Reviewed	10
Transporter Applications Processed	75
Major Facilities Inspected	40
Minor Facilities Inspected	350
Groundwater Monitoring Inspections	39
Uncontrolled Sites Investigated	76

In summary, it can be stated that the hazardous waste management program activities have been able to change to meet the needs of the state. In the program's short history, it has been demonstrated that aggressive implementation is necessary to establish the success of the program's future accomplishments.

This program is vital to the protection of the public health and environment, and it has been responsive to the needs of the people of Alabama.

Monitors Beth Ellis and David Johnson from the Houston County Health Department check for radiation as part of the annual emergency exercise for Farley Nuclear Power Plant.

Bureau of Epidemiology

BUREAU OF EPIDEMIOLOGY AND CONSULTATION

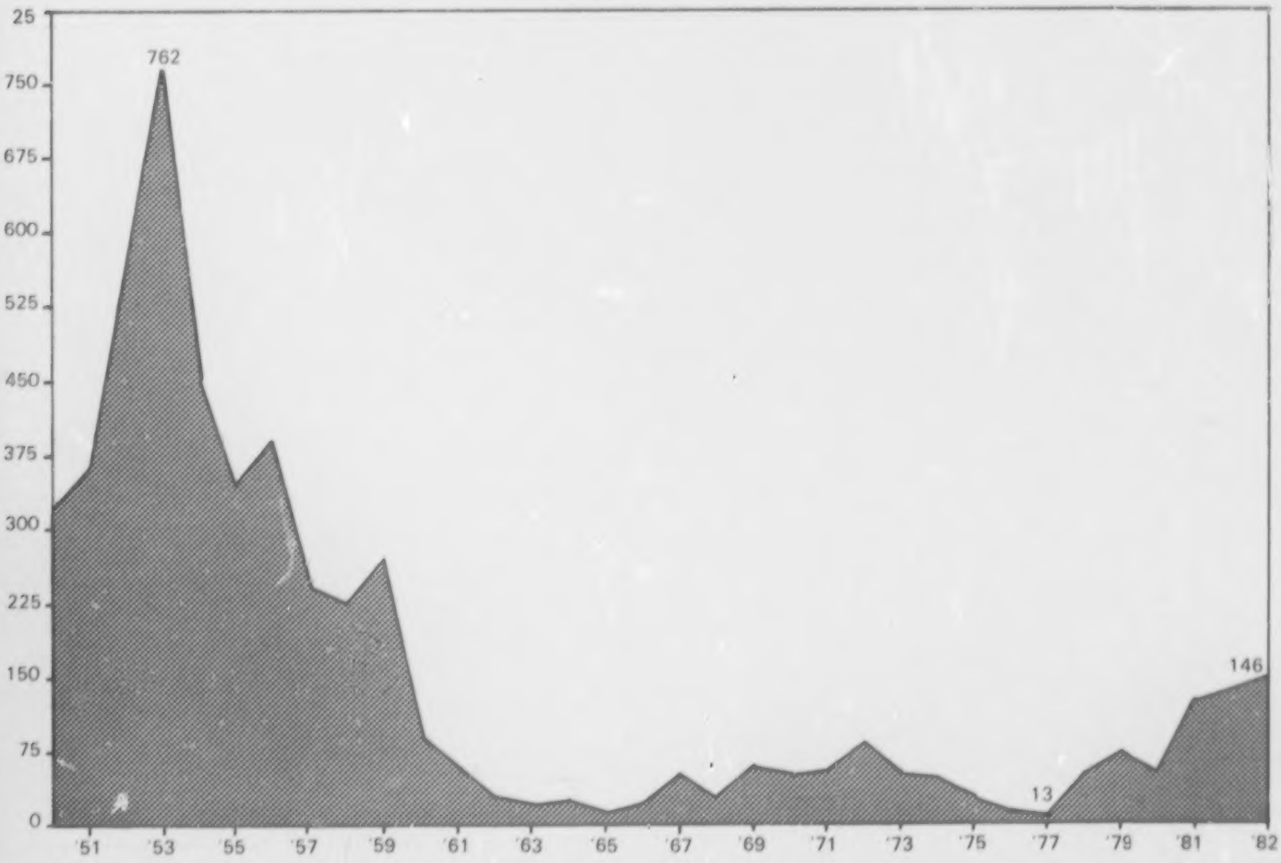
The Bureau of Epidemiology and Consultation provides professional and technical assistance through the divisions of Epidemiology, Disease Registries, and Toxic Substances and Zoonotic Diseases. It also serves as epidemiologic liaison with local health departments and other agencies. These services are available on a 24 hour, seven day a week basis.

The requests for epidemiologic services increased again this year. The 632 requests during 1982 is a 32.5 percent increase over 1981 and a 71.3 percent over 1980. Investigations or consultations on control measures for acute disease outbreaks accounted for 441 requests. Twenty-seven inquiries related to eliminating environmental and occupational hazards. The bureau responded to 23 requests for training activities and 26 contacts for information from the media.

Rabies related epidemiology made up the largest single category of inquiries. The bureau responded to 250 requests involving rabies and other zoonotic diseases and distributed 971 doses of Human Diploid Cell Rabies Vaccine (HDCV). Orders for HDCV as preexposure rabies immunizations for high risk groups continued to increase during 1982. Eighty doses of HDCV were distributed for this purpose, along with 69 doses as boosters for those previously immunized for rabies. The Alabama Department of Public Health continues to distribute this vaccine and to provide consultation to physicians, hospitals and laboratories on a daily basis.

Requests for assistance with central nervous system diseases, including meningitis and encephalitis, ranked second. Fifty-seven cases or outbreaks of central nervous system related illnesses were reported. The bureau coordinated the submission of specimens to the Clinical Laboratory Administration and the provision of control measures, including prophylaxis for contacts.

GRAPH 7-1
LABORATORY CONFIRMED RABIES
ALL SPECIES
1950-1982



The bureau investigated 53 reports of food or waterborne illnesses during 1982. Institutions such as hospitals, schools, nursing homes and church groups were involved in five of these incidents. Four outbreaks associated with the consumption of raw oysters were also investigated.

The fourth largest group consisted of 48 requests for assistance in evaluation of hepatitis. During the year 629 cases of hepatitis were reported to the bureau (hepatitis A—128, hepatitis B—381, Unspecified—57 and Non A, Non B—63) and hundreds of contacts received immune globulin prophylaxis through the local health departments. Six investigations involved jails, prisons and other detention centers where hepatitis B remains as a major infectious disease. Control of hepatitis B in certain settings and in selected groups was greatly improved by the development of Heptavax. This vaccine is commercially available and in widespread use throughout the state. Four outbreaks of hepatitis among day care center employees, children and their parents were investigated, as were two outbreaks at schools and universities.

Histoplasmosis continues as an endemic problem in Alabama. Ten requests for assistance were received by the bureau during 1982, and 131 cases of histoplasmosis were confirmed. A major outbreak at one of the universities in the state resulted in the serological evaluation of 185 students, with 30 laboratory confirmed cases reported. Extensive cooperation was achieved between the Clinical Laboratory Administration, the local health department and this bureau during the outbreak. Efforts by other state health departments in locating students for specimen collection were also greatly appreciated. Procedures for identification of contaminated roost areas, protocol for decontaminating these areas and consultation on patient evaluation were provided upon request.

Diseases in day care centers and nursing homes continued to present problems. Outbreaks of hepatitis, salmonellosis, shigellosis and an unusually large number

TABLE 7-1
SEASONAL OCCURRENCE OF DISEASES
1982

Diseases	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Amebiasis	1				1			1	1			
Brucellosis		1				1	1	1			1	
Campylobacter	2	7	8	2	4	4	5	6	5	7	1	5
Diphtheria												
Encephalitis	1		1	1	2	1	5	4		1	1	1
Giardiasis	32	3		1	1	1	2	45	78	121	76	75
Gonorrhea	1,248	2,444	1,794	1,733	2,269	1,911	2,443	2,066	2,485	1,993	1,631	3,075
Hepatitis, A	10	3	10	7	9	5	8	10	8	19	2	37
Hepatitis, B	29	36	21	44	44	23	27	36	19	40	21	41
Hepatitis, Unspec.	10	5	4	6	6	6	1	7	4	4	1	3
Hep., Non A, Non B	4	8	3	8	8	2	3	7	3	13	2	2
Histoplasmosis	5	7	11	6	7	47	15	3	7	11	2	10
Legionellosis	2	1	3							1	1	1
Leptospirosis											2	
Malaria										1		1
Measles										2		
Meningitis, Aseptic	15	7	15	7	13	19	23	49	13	104	34	22
Meningococcal Men.	8	6	11	4	8	5		1	1	4	4	4
Mumps		1	1	2		1		1	2	1		1
Pertussis							1	3	1			
Psittacosis						1						
Poliomyelitis												
Rabies in Animals	6	6	9	11	13	12	19	32	21	2	12	3
Reye Syndrome	1	2	2	2	1	1	1					
Rocky Mt. Spotted Fev.	3					1	2	4	2	3	2	2
Rubella												
Salmonellosis	29	18	19	27	53	30	76	63	51	73	48	56
Shigellosis	1	3	4	4	5	7	6	9	8	13	10	14
Smallpox												
Syphilis	112	143	138	111	125	127	99	154	126	130	129	116
Tetanus					3	1	1					1
Tuberculosis	68	47	46	51	69	55	60	45	45	47	54	44
Tularemia												
Typhoid Fever	4	1	1		1	2						1
Typhus, Murine		1										

of cases of giardiasis in day care centers were reported during the year.

The Bureau of Epidemiology and Consultation provided consultation on control of hospital infections again this year. By working with others concerned with this problem, the bureau hopes to establish a hospital based reporting system of diseases. Better morbidity reporting will aid the bureau in being aware of the prevalence of diseases.

A 1981 law gave the State Committee of Public Health authority to designate which diseases must be reported. The bureau distributed more than 5,000 copies of *Rules and Regulations Governing the Enumeration and Reporting of Notifiable Diseases.* The "Notifiable Disease Case Report Cards" were included in this distribution, but no appreciable increase in reports were received in 1982.

The bureau continued to publish the *Communicable Disease Report.* This monthly newsletter contains information on currently threatening diseases, features or short articles on prevalent diseases, and notification of disease trends. The Division of Disease Registries circulated a quarterly cumulative report on the prevalence of communicable diseases in each county. Since the Centers of Disease Control has reduced its distribution of the *MMWR: Morbidity and Mortality Weekly Report,* this report takes on added significance.

Protocols for investigating diseases and initiating control enable county health departments to proceed more expeditiously with routine disease control measures. Control is more uniformly implemented throughout the state also.

The Bureau of Epidemiology and Consultation works closely with other units of the State Health Department, especially with the Clinical Laboratory and Environmental Health Administration. The laboratory provides diagnostic and consultative services. Technical and engineering expertise of the Environmental Health Administration is utilized in incidents of environmental contamination. Cooperation of local health departments is essential to the bureau.

TABLE 7-2
CASES OF COMMUNICABLE DISEASES
1972-1982

Diseases	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Amebiasis	3	2	4	1	4	1	5	2	7	4	4
Brucellosis	2		1	3	3	2	3	3	6	4	5
Campylobacter									24	61	56
Diphtheria	7	6									
Encephalitis	28	19	9	78	87	12	16	28	12	23	18
Giardiasis											435
Gonorrhea	15,934	19,704	21,673	24,418	25,026	24,936	25,082	26,012	24,464	25,178	25,092
Hepatitis, A	382	478	323	304	218	212	224	267	237	155	128
Hepatitis, B	101	195	186	259	221	175	168	236	273	289	381
Hepatitis, Unspec.			42	43	35	74	57	120	138	78	57
Hep., Non A, Non B										32	63
Histoplasmosis								50	21	72	131
Legionellosis						13	13	10	10	7	9
Leptospirosis				4	2	5	1	2	1	1	2
Malaria	18	5		6	2	6	2	6	8	10	2
Measles	161	14	21	5		79	102	129	22	2	2
Meningitis, Aseptic	86	139	69	159	136	183	148	289	637	326	321
Meningococcal Inf.	20	19	13	32	40	61	52	41	58	68	56
Mumps	860	758	618	454	368	400	437	28	36	19	10
Pertussis	30	15	20	46	6	4	3	4	3		5
Psittacosis	1					1		2	2		1
Poliomyelitis			1								
Rabies in Animals	82	52	48	34	18	13	53	73	56	123	146
Reye syndrome			3	3	3	2	5	7	10	14	10
Rocky Mt. Spotted Fev.	20	28	14	10	15	20	13	21	18	24	19
Rubella	63	210	66	23	2	110	25	44	3	1	
Salmonellosis	346	404	328	329	382	425	486	474	534	603	543
Shigellosis	98	121	130	208	114	125	246	121	157	61	84
Smallpox											
Syphilis	405	442	519	542	432	350	421	577	893	1,062	1,510
Tetanus	3	4	1	1	2	3		5	4	2	6
Tuberculosis	918	790	785	780	824	704	672	644	665	640	631
Tularemia	1		2			1	1		2		
Typhoid Fever	11	14	4	3	1	1	3	8	4	5	10
Typhus, Murine							1				1

TABLE 7-3
COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE
1982

		Amebiasis			Brucellosis			Campylobacter			Encephalitis		
		White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total
	Entire State	1	1	4	3	1	5	27	4	56	18	0	18
PHA 1	Colbert							1		1			
	Cullman												
	Franklin												
	Jackson												
	Lauderdale												
	Lawrence												
	Limestone												
	Madison									1			
	Marion												
	Marshall										2		2
	Morgan				1		1						
	Winston									1			
PHA 2	Bibb									1			
	Fayette												
	Greene												
	Hale					1	1						
	Lamar												
	Pickens				1		1				1		1
	Tuscaloosa							1		1			
PHA 3	Blount												
	Chilton												
	Jefferson			1				2		17	3		3
	St. Clair												
	Shelby							1		1	2		2
	Walker							4		4			
PHA 4	Calhoun												
	Chambers												
	Cherokee												
	Clay												
	Cleburne												
	Coosa												
	DeKalb												
	Etowah												
	Randolph												
	Talladega												
	Tallapoosa										1		1
PHA 5	Autauga												
	Barbour												
	Bullock												
	Butler										1		1
	Coffee							1		1			
	Covington												
	Crenshaw												
	Dale												
	Elmore									1			
	Geneva												
	Henry												
	Houston				1		2	5	1	6	1		1
	Lee												
	Lowndes												
	Pike												
	Macon												
	Montgomery			1				3		5	1		1
	Russell										1		1
PHA 6	Baldwin										2		2
	Choctaw												
	Clarke		1	1									
	Conecuh												
	Dallas										1		1
	Escambia												
	Marengo												
	Mobile	1		1				8	3	15	2		2
	Monroe												
	Perry												
	Sumter												
	Washington							1		1			
	Wilcox												

Total includes reports not stating race

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TABLE 7-4
COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE
1982

		Giardiasis			Gonorrhea			Hepatitis A			Hepatitis B		
		White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total
	Entire State	16	1	435			25,092	109	18	128	204	173	381
PHA 1	Colbert						234	5		5	1		1
	Cullman			7			35	2		2	3		3
	Franklin						83	1		1	2		2
	Jackson			3			2	1		1	4		4
	Lauderdale						233	1		1	1		1
	Lawrence			3			45	2		2	1	1	2
	Limestone			6			100	1		1	2	1	3
	Madison			1			1,686	2		2	6	1	7
	Marion						30	2		2	1		1
	Marshall			1			30	10		10	4		4
	Morgan			16			187	33		33	11	1	12
	Winston						10				3		3
PHA 2	Bibb						48						
	Fayette						24				1		1
	Greene						128						
	Hale						113					2	2
	Lamar						15						
	Pickens						69						
	Tuscaloosa		1	2			1,360	1		1	4	5	10
PHA 3	Blount			1			19				1		1
	Chilton						75						
	Jefferson			88			6,908	15	4	19	54	55	109
	St. Clair			2			26				2	1	3
	Shelby			1			76	1		1	4		4
	Walker	1		1			118	1		1	3		4
PHA 4	Calhoun			3			570	1	2	3	3	1	4
	Chambers						57				1		1
	Cherokee			1			2						
	Clay						39	1		1	1		1
	Cleburne										1		1
	Coosa						31						
	DeKalb			2			40	1		1			
	Etowah			5			303				3	2	5
	Randolph						23						
	Talladega						300	1		2	2	1	3
	Tallapoosa						42				2		2
PHA 5	Autauga			1			43				1	1	2
	Barbour			2			100					2	2
	Bullock						61						
	Butler	1		6			60	3		3			
	Coffee			4			43				1	2	3
	Covington			6			114				1	1	2
	Crenshaw			5			35						
	Dale			3			169						
	Elmore			4			142	1		1	1	1	2
	Geneva			8			11				1		1
	Henry			5			32					1	1
	Houston	1		25			526	1		1	9	3	12
	Lee			7			198				1	1	2
	Lowndes			2			131		1	1			
	Pike			1			151	2		2		1	1
	Macon						100						
	Montgomery	1		37			3,529	6	3	9	14	24	40
	Russell						215	1		1	1	1	2
PHA 6	Baldwin			14			210	2	1	3	3		3
	Choctaw			2			58						
	Clarke			2			45				1		1
	Conecuh						58				1	1	2
	Dallas			4			992		1	1	1	1	2
	Escambia			4			66					1	1
	Marengo						121				1		1
	Mobile	12		145			4,489	11	6	17	45	60	105
	Monroe			1			58				1		1
	Perry						80						
	Sumter						25						
	Washington			4			28						
	Wilcox						141					1	1

Total includes reports not stating race

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TABLE 7-6
COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE
1982

		Hepatitis, Unspec.			Hepatitis, Non A, Non B			Histoplasmosis			Legionellosis		
		White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total
	Entire State	43	14	57	56	5	63	36	16	131	4	2	9
PHA 1	Colbert				1		1						
	Cullman				1		1						
	Franklin												
	Jackson				1		1						
	Lauderdale												
	Lawrence				2		2						
	Limestone												
	Madison	1		1	2		2	3		6	1		1
	Marion							1		1			
	Marshall	3		3	5		5			1			
	Morgan	1		1	3		3	4		4			
	Winston	1		1	3		3						
PHA 2	Bibb												
	Fayette												
	Greene												
	Hale												
	Lamar												
	Pickens				1		1						
	Tuscaloosa	1		1	2		2	9	2	54			
PHA 3	Blount	1		1	1		1						
	Chilton												
	Jefferson	16	8	24	23	4	27	7	3	19	2		2
	St. Clair	3		3	1		1						
	Shelby	1		1			1						
	Walker	1		1									
PHA 4	Calhoun	1	1	2	2		2						
	Chambers	2		2									
	Cherokee												
	Clay												
	Cleburne												
	Coosa												
	DeKalb	1		1									
	Etowah				1		2			1			
	Randolph												
	Talladega	1		1	1		1						
	Tallapoosa												
PHA 5	Autauga								1	3			
	Barbour												
	Bullock												
	Butler												
	Coffee												
	Covington												
	Crenshaw												
	Dale												
	Elmore	1		1				1	1	4			
	Geneva												
	Henry												
	Houston							1		2			
	Lee												
	Lowndes												
	Pike										1		1
	Macon								2	2			
	Montgomery	2	1	3	2		2	10	7	32			1
	Russell												
PHA 6	Baldwin	1	2	3									
	Choctaw												
	Clarke												
	Conecuh												
	Dallas		1	1						1			
	Escambia	1		1									
	Marengo												
	Mobile	2	1	3	4	1	5			2		2	4
	Monroe	1		1									
	Perry	1		1									
	Sumter												
	Washington												
	Wilcox												

Total includes reports not stating race

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TABLE 7-6
COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE
1982

		Leptospirosis			Malaria			Measles			Meningitis, Aseptic		
		White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total
	Entire State	2		2	1	1	2	2		2	238	79	321
PHA 1	Colbert												
	Cullman	1		1							4		4
	Franklin												
	Jackson												
	Lauderdale												
	Lawrence										2		2
	Limestone										1		1
	Madison										1	1	2
	Marion												
	Marshall										4		4
	Morgan										8		8
	Winston										6		6
PHA 2	Bibb												
	Fayette										1		1
	Greene												
	Hale											1	1
	Lamar												
	Pickens												
	Tuscaloosa										2		2
PHA 3	Blount										3		3
	Chilton										2		2
	Jefferson	1		1							105	57	164
	St. Clair										3		3
	Shelby										12	2	14
	Walker										18	5	23
PHA 4	Calhoun										2		2
	Chambers												
	Cherokee												
	Clay										1		1
	Cleburne												
	Coosa												
	DeKalb												
	Etowah										4		4
	Randolph												
	Talladega										1		1
	Tallapoosa												
PHA 5	Autauga												
	Barbour												
	Bullock										1		1
	Butler												
	Coffee												
	Covington												
	Crenshaw												
	Dale												
	Elmore										1		1
	Geneva												
	Henry												
	Houston										6	2	8
	Lee										1		1
	Lowndes												
	Pike												
	Macon												
	Montgomery										9		9
	Russell												
PHA 6	Baldwin										5		5
	Choctaw												
	Clarke										3	2	5
	Conecuh												
	Dallas												
	Escambia												
	Marengo											1	1
	Mobile				1	1	2	2		2	32	8	42
	Monroe												
	Perry												
	Sumter												
	Washington												
	Wilcox												

Total includes reports not stating race

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TABLE 7-7
COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE
1982

		Meningococcal Meningitis			Mumps			Pertussis			Psittacosis		
		White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total
	Entire State	42	13	56	5	2	10	3	1	5	1		1
PHA 1	Colbert	1		1									
	Cullman	1		1	1		1						
	Franklin												
	Jackson												
	Lauderdale				1		1						
	Lawrence												
	Limestone												
	Madison	2		2									
	Marion												
	Marshall												
	Morgan												
	Winston	1		1									
PHA 2	Bibb												
	Fayette				1		1						
	Greene	1		1									
	Hale												
	Lamar												
	Pickens												
	Tuscaloosa	3		3									
PHA 3	Blount	1		1			2						
	Chilton	1		1									
	Jefferson	10	1	12				1		1			
	St. Clair	1	1	2									
	Shelby												
	Walker	1		1									
PHA 4	Calhoun	1	1	2						1			
	Chambers												
	Cherokee												
	Clay												
	Cleburne												
	Coosa	1		1									
	DeKalb												
	Etowah	3		3									
	Randolph												
	Talladega	1		1									
	Tallapoosa	1		1									
PHA 5	Autauga												
	Barbour												
	Bullock												
	Butler		1	1									
	Coffee												
	Covington												
	Crenshaw												
	Dale												
	Elmore							1		1			
	Geneva												
	Henry		2	2	1		1						
	Houston	1	1	2									
	Lee												
	Lowndes												
	Pike												
	Macon												
	Montgomery	5	1	6									
	Russell												
PHA 6	Baldwin	2		2									
	Choctaw												
	Clarke												
	Conecuh						1						
	Dallas												
	Escambia	1		1	1		1						
	Marengo												
	Mobile	3	4	7		2	2	1	1	2	1		1
	Monroe		1	1									
	Perry												
	Sumter												
	Washington												
	Wilcox												

Total includes reports not stating race

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TABLE 7-8
COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE
1982

		Rabies in Animals			Reye Syndrome			Rocky Mt. Spotted Fever			Salmonellosis		
		White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total
	Entire State			146	9		10	16	2	19	31	16	543
PHA 1	Colbert			3								1	2
	Cullman			2									1
	Franklin												
	Jackson												
	Lauderdale			2				3		3			10
	Lawrence			1				1		1			
	Limestone			22	1		1				1		1
	Madison			5				1	1	2			14
	Marion												
	Marshall							1		1	1		2
	Morgan			3							8	3	13
	Winston												
PHA 2	Bibb				1		1						
	Fayette												
	Greene												
	Hale												1
	Lamar												
	Pickens							1		1			1
	Tuscaloosa			1				1		1	2	1	40
PHA 3	Blount										1		1
	Chilton												
	Jefferson			10	1		2		1	1			185
	St. Clair							1		1			
	Shelby			4				1		1			
	Walker			1				1		1	4		5
PHA 4	Calhoun			4						1	2		12
	Chambers			1				1		1			1
	Cherokee												
	Clay			2									
	Cleburne												
	Coosa												
	DeKalb										1		1
	Etowah				1		1						14
	Randolph												2
	Talladega			5				1		1		1	1
	Tallapoosa												
PHA 5	Autauga			1								1	6
	Barbour			1									2
	Bullock												
	Butler												
	Coffee			15									4
	Covington			6									1
	Crenshaw			4									
	Dale			5								1	1
	Elmore			5							2		9
	Geneva			14									
	Henry			2									3
	Houston			12	1		1				1	1	26
	Lee			2									
	Lowndes							1		1			
	Pike			2								1	17
	Macon			3								1	1
	Montgomery			5	2		2				3	2	60
	Russell				1		1						4
PHA 6	Baldwin							2		2	1		1
	Choctaw												
	Clarke												
	Conecuh			2									
	Dallas												1
	Escambia										1		1
	Marengo											1	1
	Mobile			1	1		1				3	2	98
	Monroe												
	Perry												
	Sumter												
	Washington												
	Wilcox												

Total includes reports not stating race

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TABLE 7-9
COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE
1982

		Shigellosis			Syphilis			Tetanus			Tuberculosis		
		White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total
	Entire State	11	9	84			1,510	3	3	6	302	329	631
PHA 1	Colbert						3				3	1	4
	Cullman						3				6		6
	Franklin						2				6		5
	Jackson						4				6		6
	Lauderdale						6				7	7	14
	Lawrence										6	3	9
	Limestone						7				5	2	7
	Madison			7			27				11	22	33
	Marion										9	1	11
	Marshall										11		11
	Morgan						17				12	7	19
	Winston										3	1	4
PHA 2	Bibb											1	1
	Fayette						2					1	1
	Greene						2					1	1
	Hale						1					1	1
	Lamar										1		1
	Pickens										4	1	5
	Tuscaloosa	1		3			19	1		1	16	16	32
PHA 3	Blount						1				7		7
	Chilton						13				2		2
	Jefferson	1	1	34			432				37	84	120
	St. Clair			6			3				8	2	10
	Shelby						3				4	1	5
	Walker						4				8		8
PHA 4	Calhoun						26				19	9	28
	Chambers						7				1	1	2
	Cherokee										1	1	2
	Clay						1					1	1
	Cleburne						3				1		1
	Coosa						1						
	DeKalb						2				17	1	18
	Etowah			3			5				15	7	23
	Randolph						3					2	2
	Talladega						6				4	5	9
	Tallapoosa						1				2	3	5
PHA 5	Autauga						8				3		3
	Barbour						17					2	2
	Bullock						6				1	3	4
	Butler						2					3	3
	Coffee						3				1	1	2
	Covington						7	1		1	4		4
	Crenshaw										1		1
	Dale						8				6	3	9
	Elmore						6				3		3
	Geneva												
	Henry						9				1	1	2
	Houston	1		6			118				3	6	9
	Lee	1		1			11					10	10
	Lowndes						11						
	Pike						7					1	1
	Macon						27					6	6
	Montgomery			3			325		2	2	4	20	24
	Russell						10				1	4	5
PHA 6	Baldwin						9				4	5	9
	Choctaw						1					3	3
	Clarke						10				1	1	2
	Conecuh						2				2		2
	Dallas						55				2	7	9
	Escambia	1		2			21				2	5	7
	Marengo			1			3				2	1	3
	Mobile	6	8	18			197	1	1	2	24	59	83
	Monroe						19				2	1	3
	Perry						1					4	4
	Sumter						1				1	1	2
	Washington						2				2		2
	Wilcox						10						

Total includes reports not stating race

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TABLE 7-10
COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE
1982

		Typhoid Fever			Typhus, Murine			Diphtheria			Poliomyelitis		
		White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total
	Entire State	6	4	10	1		1			0			0
PHA 1	Colbert												
	Cullman												
	Franklin												
	Jackson	2		2									
	Lauderdale												
	Lawrence												
	Limestone												
	Madison		2	2									
	Marion												
	Marshall												
	Morgan												
	Winston												
PHA 2	Bibb												
	Fayette												
	Greene												
	Hale												
	Lamar												
	Pickens	1		1									
	Tuscaloosa												
PHA 3	Blount												
	Chilton												
	Jefferson	2	2	4									
	St. Clair												
	Shelby												
	Walker												
PHA 4	Calhoun												
	Chambers												
	Cherokee												
	Clay												
	Cleburne												
	Coosa												
	DeKalb												
	Etowah												
	Randolph												
	Talladega												
	Tallapoosa												
PHA 5	Autauga												
	Barbour												
	Bullock												
	Butler												
	Coffee												
	Covington												
	Crenshaw												
	Dale												
	Elmore												
	Geneva												
	Henry												
	Houston												
	Lee												
	Lowndes												
	Pike												
	Macon												
	Montgomery	1		1									
	Russell												
PHA 6	Baldwin												
	Choctaw												
	Clarke												
	Conecuh												
	Dallas												
	Escambia												
	Marengo												
	Mobile				1		1						
	Monroe												
	Perry												
	Sumter												
	Washington												
	Wilcox												

Total includes reports not stating race

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TABLE 7-11
DISEASE INCIDENCE BY AGE GROUPS
1982

AGE GROUP	AMEBIASIS					BRUCELLOSIS					CAMPYLOBACTER					ENCEPHALITIS					GIARDIASIS				
	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL
	M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F	
0- 4				1	1						3	8		3	14	1	1			2	3	3		1	7
5- 9												1			1	1	2			3	1	1			2
10-14																2	1			3	4	2			6
15-19											3				3	2	1			3					
20-24											1				1		1			1					
25-34											1		1		2	1	1			2		2			2
35-44		1			1						2	1			3		2			2					
45-54						2				2	1	1			2										
55-64							1	1		2		1			1		1			1					
65-74												1			1	1				1					
75+											1				1										
N.S.											2				2										
TOTAL BY RACE	1		1			3		1			27		4			18					16		1		
TOTAL	2					4					31					18					17				
UNCLASSI-FIED	2					1					25					0					418				
GRAND TOTAL	4					5					56					18					435				

TABLE 7-12
DISEASE INCIDENCE BY AGE GROUPS
1982

AGE GROUP	HEPATITIS A					HEPATITIS B					HEPATITIS, UNSPEC					HEPATITIS, NON A, NON B					LEPTOSPIROSIS				
	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL
	M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F	
0- 4	3	3			6			1		1															
5- 9	7	4			11				1	1															
10-14	3	3			6	2		1	1	4						1	1			2					
15-19	10	6	4		20	12	20	12	5	49	6	2	2		10	3	3		1	7					
20-24	11	11	4	3	29	24	27	18	18	87	6	2	2	1	11	3	5		1	9					
25-34	15	9	5	1	30	41	21	46	26	134	7	4	3	2	16	9	8	1		18					
35-44		1		1	2	7	10	8	4	29	2	1		2	5	2	6		1	9	1				1
45-54	6	2			8	7	5	6	7	25	1	3		2	6	2	1		1	4	1				1
55-64	3	2			5	12	3	5	3	23	2	1			3	1	2			3					
65-74	3	1			4	5	5	4	4	18	2	1			3	3	1			4					
75+		2			2		2		2	4	1	2			3	1	3			4					
N.S.	1	3			4	1		1		2						1				1					
TOTAL BY RACE	109		18			204		173			43		14			56		5			2				
TOTAL	127					377					57					61					2				
UNCLASSI-FIED	1					4					0					2					0				
GRAND TOTAL	128					381					57					63					2				

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TABLE 7-13
DISEASE INCIDENCE BY AGE GROUPS
1982

AGE GROUP	MALARIA					MENINGITIS, ASEPTIC					MENINGOCOCCAL, MEN.					PSITTACOSIS					ROCKY MT. SPOTTED FEV.				
	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL
	M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F	
0- 4						33	41	25	18	117	13	11	3	5	32						1	1			2
5- 9						20	12	9	7	48	1	1	1		3						3		1		4
10-14						14	3	2		19	1		1	1	3						1	1			2
15-19						14	6	2		22	3	1	1		5						2	1			3
20-24						4	16	1	2	23	1	2			3						1				1
25-34	1		1		2	28	22	4	3	57	1				1						1		1		2
35-44						10	4		1	15			1		1							2			2
45-54						4	3			7		1			1		1			1	1				1
55-64						1	3		2	6	1	2			3										
65-74									1	1		1			1							1			1
75+								1	1	2		1			1										
N.S.											1				1										
TOTAL BY RACE	1		1			238		79			42		13			1					16		2		
TOTAL	2					317					55					1					18				
UNCLASSIFIED	0					4					1					0					1				
GRAND TOTAL	2					321					56					1					19				

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TABLE 7-14
DISEASE INCIDENCE BY AGE GROUPS
1982

AGE GROUP	REYE SYNDROME					RUBELLA					SALMONELLOSIS				
	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL
	M	F	M	F		M	F	M	F		M	F	M	F	
0- 4	2	3			5						7		5	3	15
5- 9												1	2	1	4
10-14	2	2			4							2		1	3
15-19											1				1
20-24											1			2	3
25-34											3	4	1		8
35-44											1	1			2
45-54													1		1
55-64												1			1
65-74											1	3			4
75+											2	1			3
N.S.											2				2
TOTAL BY RACE	9		0								31		16		
TOTAL	9										47				
UNCLASSIFIED	1										496				
GRAND TOTAL	10					0					543				

AGE GROUP	SHIGELLOSIS					TETANUS				
	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL
	M	F	M	F		M	F	M	F	
0- 4	2	1	4	1	8					
5- 9	1			1	2					
10-14				1	1					
15-19	1	2			3					
20-24				2	2					
25-34	1	1			2		1			1
35-44	1				1					
45-54										
55-64										
65-74						1		1	1	3
75+							1	1		2
N.S.	1				1					
TOTAL BY RACE	11		9			3		3		
TOTAL	20					6				
UNCLASSIFIED	64					0				
GRAND TOTAL	84					6				

TABLE 7-15
DISEASE INCIDENCE BY AGE GROUPS
1982

AGE GROUP	TUBERCULOSIS					TYPHOID FEVER					TYPHUS FEVER					DIPHTHERIA					POLIOMYELITIS				
	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL
	M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F	
0- 4	1	3	5	4	13			3		3															
5- 9			2	2	4																				
10-14		1	2	4	7																				
15-19		1	3	5	9																				
20-24	2		9	11	22		1			1															
25-34	10	12	25	11	58		1			1															
35-44	23	8	47	7	85						1				1										
45-54	34	4	25	7	70																				
55-64	39	5	41	17	102		1			1															
65-74	40	20	38	14	112				1	1															
75+	65	31	31	12	139		3			3															
N.S.	2	1	6	1	10																				
TOTAL BY RACE	302		329			6		4			1														
TOTAL	631					10					1														
UNCLASSIFIED	0					0					0														
GRAND TOTAL	631					10					1					0					0				

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TABLE 7-16
DISEASE INCIDENCE BY AGE GROUPS
1982

AGE GROUP	HISTOPLASMOSIS					LEGIONELLOSIS					MEASLES					MUMPS					PERTUSSIS				
	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL	WHITE		NONWHITE		TOTAL
	M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F	
Under 1																					1		1		2
1				1	1																1				1
2																					1				1
3		1			1											1				1					
4																	1			1					
5																									
6																	1		1	2					
7		1			1																				
8																1				1					
9																									
10			1		1																				
11																									
12	1				1							1			1										
13																									
14	1	2	1		4						1				1										
15-19	4				4														1	1					
20-24	3		1	1	5																				
25-34		1	2	2	5																				
35-44	5	3	2	2	12			1		1															
45-54	2				2	1		1		2						1				1					
55-64	5	3	1		9	1	1			2															
65-74	2			1	3		1			1															
75+																									
N.S.	2		1		3																				
TOTAL BY RACE	36		16			4		2			2					5		2			3		1		
TOTAL	52					6					2					7					4				
UNCLASSIFIED	79					3					0					3					1				
GRAND TOTAL	131					9					2					10					5				

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Family Health Administration

FAMILY HEALTH ADMINISTRATION

Reorganization of the Department of Public Health on October 1, 1982, created the Family Health Administration. The components added to the original Bureau of Maternal and Child Health/Family Planning are the Statewide Cancer Detection Program, which was placed within the Bureau of Family Planning, and the Bureau of Nutrition, which administers the Special Supplemental Food Program for Women, Infants and Children (WIC Program). Concurrently the Bureau of Maternal and Child Health/Family Planning was separated and became the Bureau of Maternal and Child Health and the Bureau of Family Planning. The Bureau of Nutrition was added as the third major component of the Family Health Administration.

Another significant event in 1982 was the forming of the Alabama Advisory Council on Maternal and Child Health. The council is composed of individuals and representatives of institutions and agencies which are interested in maternal, child and infant health as well as family planning. This council consolidated the former Family Planning/MCH Citizens Council, the Sudden Infant Death Syndrome Advisory Council, and those interested in genetics and child health services. It is anticipated that the council will optimize the relationships between service agencies and users of family planning, maternal, perinatal, infant, and child health services and will develop the most favorable community climate for the functioning of activities.

Counseling and education reinforce the physician's instruction for health care and proper use of medication.

Three subcommittees were formed. The prenatal, perinatal and infant health subcommittee addresses the needs and services of prenatal care, perinatal care, infant care, genetics and SIDS. The child health subcommittee addresses the needs and services of well child care, crippled children and health supervision. The family planning subcommittee directs its attention to the needs and services of family planning.

The Family Health Administration provides programmatic and administrative support for local programs of services for maternity; well child; sudden infant death syndrome (SIDS); early and periodic screening, diagnosis and treatment (EPSDT); family planning; cancer detection; nutrition; and supplemental foods for women, infants and children (WIC). This administration allocates resources, develops policies and procedures, and monitors expenditures of local activities. It sets standards of care as well as evaluates program performance and quality of services. In addition the administration provides staff development, training and technical assistance.

Providing preventive health care services continued to be the major emphasis of the Family Health Administration so that the health of women and children will be improved. Its goal is the reduction of maternal mortality, infant mortality and handicapping conditions in children.

BUREAU OF FAMILY PLANNING

Preventing unplanned and high risk pregnancies protects women and children since these pregnancies are associated with fetal and infant deaths, low birth weight, child abuse and maternal mortality. The Bureau of Family Planning administers the Statewide Family Planning Project which provides for voluntary family planning services, supplies and counseling to persons who would not otherwise have access to them. Also available are physician consultations, examinations, prescriptions, laboratory tests and medical referrals when indicated.

Teenage pregnancy continues to be a major health problem in Alabama despite the decrease in number of births to teenage mothers. With only minor deviations from the trend, births to teenagers have steadily decreased since 1970. The 11,976 births to teenagers in 1981 are an 8.2 percent decrease from the number reported in 1980. Total births in Alabama decreased gradually from 1970 through 1976. But since then the number of births has fluctuated, remaining above 60,000 each of the five years. In relation to the total births, births to teenagers increased from 23 percent in 1970 to 26 percent in 1973. Since then the percentage has decreased each year. In 1981 births to teenage mothers were 19.5 percent of total births.

During fiscal year 1982 the Statewide Family Planning Project provided comprehensive family planning services to 85,796 persons, of which 26,891—31.3 percent—were teenagers. Teenagers in the family planning project increased 37.9 percent in 1982. Table 8-1 gives the number of program participants by public health area. The emphasis on enrolling teenagers in family planning began to increase in 1977. Table 8-2 compares statewide participants for five years.

One reason that reducing teenage pregnancy is so important is the adverse effect of low birth weight. With birth weight below 2,500 grams being considered immature, 1,315—11 percent—of the 1981 births to teenage mothers were immature. Of the births to girls under 15 years of age, 15.9 percent were immature. In 1981, 26.9 percent of the immature births were to teenagers.

TABLE 8-1
FAMILY PLANNING PARTICIPANTS
FISCAL YEAR 1982

	Total Patients Served	Teens Served
PHA I	14,541	4,854
PHA II	5,214	1,434
PHA III	23,152	6,366
PHA IV	8,224	2,857
PHA V	18,439	6,028
PHA VI	16,224	5,351
TOTAL	85,796	26,891

TABLE 8-2
STATEWIDE FAMILY PLANNING PARTICIPANTS
1978-1982

Year	Total Patients	Teenagers
1978	70,701	10,293*
1979	70,055	20,004
1980	72,205	17,566
1981	80,237	19,502
1982	85,796	26,891

*New participants. Total not available.

Cancer Detection Division

The Cancer Detection Division continued to screen asymptomatic females 35 years of age and older to detect cervical, edometrial and breast cancer. Patients with abnormal tests were referred to their private physicians for appropriate treatment.

During fiscal year 1982 the division conducted 20,083 pelvic exams which detected 61 patients with Class III, IV or V Pap tests. Twenty-eight of these women were diagnosed and treated for cervical dysplasia while 22 had carcinoma in-situ. All 50, of course, were early cancers and precursors. In fact, only one was diagnosed this year in an incurable stage, an invasive Stage IV with distant metastasis. Found in early, curable stages were one cancer of the ovary, one adenocarcinoma of the endometrium and one invasive cervical cancer, Stage I-B.

From the 1,606 endometrial washings, 11 abnormalities were discovered. Four of which had negative Pap smears. Because of follow-up of Class O and Class II Paps tests, normally thought to be benign conditions, 19 patients with significant disease were found.

BUREAU OF MATERNAL AND CHILD HEALTH

The Bureau of Maternal and Child Health strives to reduce maternal and infant mortality and to diminish physical and mental impairment by assuring that excellent, comprehensive health care is available for mothers, infants and children. Maternity clinic services for women of childbearing age include a complete physical examination, personal and family medical history, diagnostic and screening procedures, patient education and counseling, limited treatment, and referrals.

Maternity health care services are available in most county health departments. Approximately one-fourth to one-third of the pregnant women in Alabama receive prenatal care in the local health department clinics. During fiscal year 1982, 17,979 maternity patients received clinic benefits in county health departments. Table 8-3 gives the number of maternity patients served in each public health area.

TABLE 8-3
LOCAL MATERNITY CLINIC PATIENTS
FISCAL YEAR 1982

	Patients Served
PHA I	1,640
PHA II	1,041
PHA III	6,585
PHA IV	1,403
PHA V	3,354
PHA VI	3,956
TOTAL	17,979

For the past ten years Alabama's maternal mortality rate has been somewhat erratic. Despite the basic downward trend, it has remained above, but getting closer to, the national average. However provisional data indicate that maternal deaths increased in 1982. The estimated 12 deaths from the complications of childbirth, labor and puerperium produce a 1.8 rate per 10,000 live births, up from the 1.1 rate in 1981.

The MCH Bureau administers the Perinatal Project which provides funds for more extensive services. These include prenatal care; primary, secondary and tertiary levels of care for hospital patients; follow-up assessment and evaluation of infants through the first year of life; and transportation for patients to receive appropriate health care. Funds from this project are also allocated for professional education for those responsible for the medical welfare of mothers and infants.

In the past ten years Alabama has made significant progress in reducing infant mortality. To reduce infant deaths further, Alabama must ensure that infants and children have access to quality diagnostic and preventive child health programs. Well child clinics are available in most counties. Early and periodic screening, diagnosis and treatment (EPSDT) are available for children eligible for Medicaid. The Bureau of Maternal and Child Health coordinates these programs with the county health departments. The local well child clinics provided health care to 53,701 children in 1982. Table 8-4 gives a PHA breakdown of numbers served.

Getting a checkup may be important to some people, but sometimes it is just a big bore.

TABLE 8-4
LOCAL WELL CHILD CLINIC PARTICIPANTS
FISCAL YEAR 1982

	Patients Served
PHA I	4,947
PHA II	2,684
PHA III	29,442
PHA IV	2,797
PHA V	8,668
PHA VI	5,163
TOTAL	53,701

Despite considerable improvement in infant mortality rates, Alabama remains above the national average. In 1972 Alabama recorded a 22.4 infant mortality rate, compared to an 18.5 rate for the United States. In 1981 these were down to 12.9 for Alabama and 11.7 for the United States. Indications are that Alabama's infant mortality rate increased in 1982. A 13.8 infant mortality rate resulted from the estimated 882 infant deaths.

Even though the infant mortality rate for nonwhites remains above that of whites in Alabama, there has been a greater improvement for nonwhites. In 1972 whites had a 17.2 rate per 1,000 live births while the nonwhite population recorded a 32.1 infant mortality rate. By 1981 the rate had improved to 10.2 for whites and 18.0 for nonwhites.

BUREAU OF NUTRITION

The Bureau of Nutrition is responsible for administering the Special Supplemental Food Program for Women, Infants and Children (WIC Program). On October 1, 1982, the Bureau of Nutrition was assigned to the Family Health Administration.

All county health departments except one conduct WIC programs. Lowndes County citizens are served by the Lowndes County Health Services Incorporated.

With unmatched federal funds from the United States Department of Agriculture, the WIC Program provided supplemental food to 98,788 individuals during fiscal year 1982. An average of 7,471 women, 17,532 infants and 24,857 children were served each month. Each individual received an average of $26.12 worth of food a month. Priorities I, II and III were certified on the program during the entire year. No limitations were placed on local agencies as to the number of individuals who could be served within these priorities. Participants served in these priorities must demonstrate nutritional risk documented by hematological or anthropometric measurements.

Potential participants were evaluated by physicians, nutritionists or nurses to determine if they were at nutritional risk because of inadequate diets and inadequate

A WIC clerk conducts a preliminary interview of a potential participant in the supplemental food program. If she is eligible, she will receive vouchers which she can use to secure foods high in the nutrients needed for growth and development.

incomes. If they met the criteria established for the priorities, they were certified to participate in the program.

The WIC Program makes available foods which are high in the nutrients needed by pregnant and nursing women, infants, and children. Eligible participants receive milk, eggs, cheese, iron fortified cereal, citrus juices and iron fortified infant formula. These foods help provide the nutrition essential during early development and growth.

In the local program areas nutritionists, nurses and trained clerical personnel provide the mandated nutrition education component of the WIC Program. These staff discuss the nutritional needs of the participants and the supplemental foods as a means of meeting these needs. They provide information on the best use of the foods and explain the importance of health care. If WIC participants need specific attention, they are referred to health department clinics or other appropriate agencies in the community.

From March 1982 through September 1982, 244,566 basic and secondary encounters were reported on the monthly nutrition education reports. These encounters represent both nutrition counseling and education.

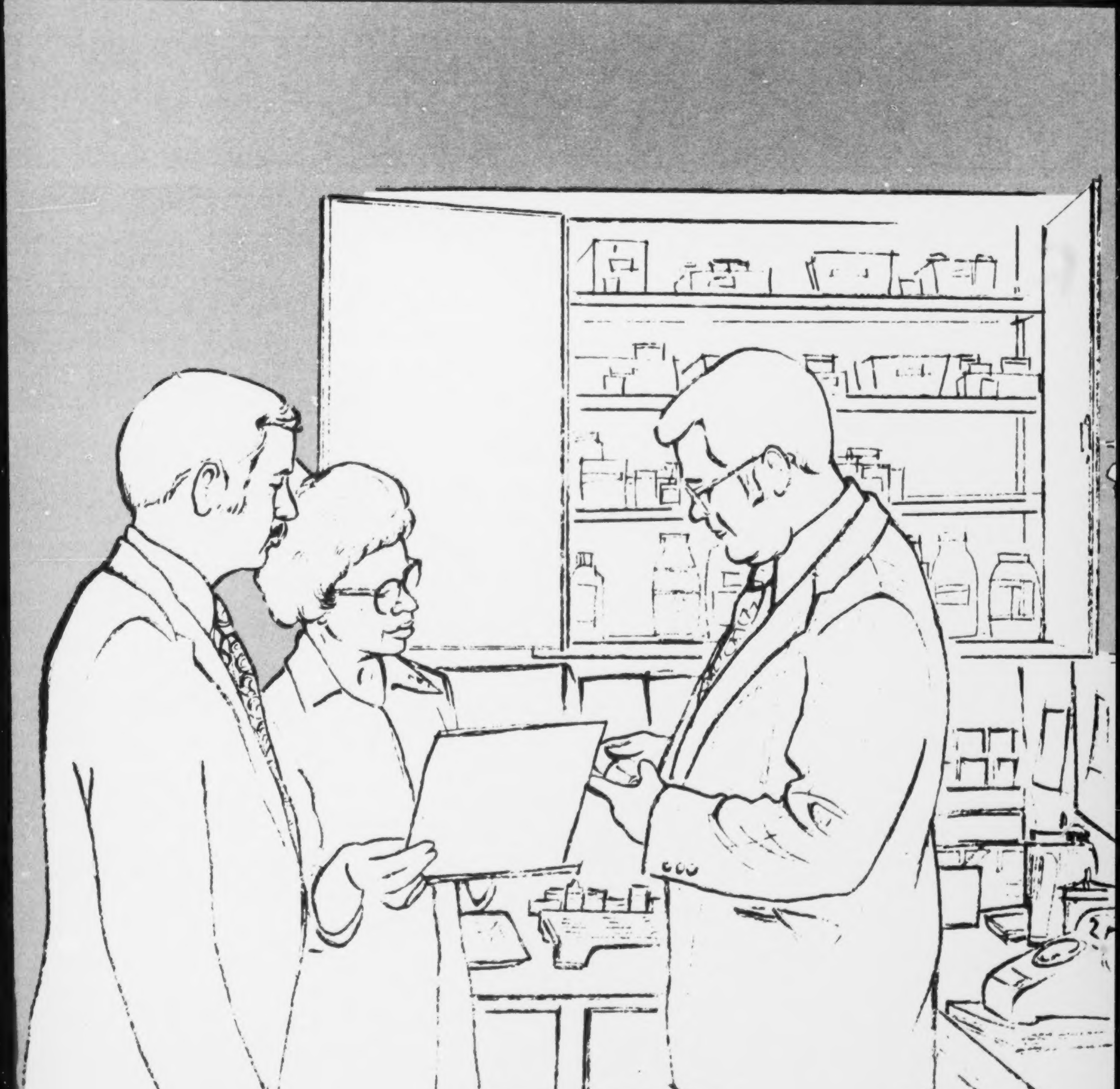
The state nutrition education component of WIC emphasized the assessment of needs in the local programs and the development of plans to implement objectives to meet identified needs. Area coordinators received instructions in plan development during a workshop conducted by the Madison County health officer. Two area plans were written to test the feasibility of developing and implementing area plans instead of individual local plans.

Area nutrition education workshops were conducted under the direction of area and local coordinators. This arrangement to meet specific training needs of agencies was effective without the added expense of travel and per diem.

Due to the revisions of criteria used to certify participants as WIC eligible, training sessions were conducted by state WIC staff and area WIC coordinators during August and September 1982. To update staffs on these changes, a total of 175 employees participated in these training sessions. During the year 50 employees attended nursing staff development sessions, and 64 employees attended nutrition related workshops, conferences and lectures. In addition 27 employees attended the Alabama Public Health Association meeting. The knowledge which these employees gained at these meetings is reflected in the high standards obtained by the WIC programs across the state.

At the end of the report period, the state WIC staff consisted of four administrators, 117 clerical employees, 48 nurses and 41 nutritionists.

Bureau of Licensure and Certification



BUREAU OF LICENSURE AND CERTIFICATION

Division of Certification

For health facilities, agencies and individuals to be reimbursed through the Medicare and Medicaid programs, they must meet federal and state standards. The Bureau of Licensure and Certification has an agreement with the Department of Health and Human Services and the Medical Services Administration (the Alabama Medicaid Agency) to provide the certification inspections. In addition the bureau contracts with the Alabama Medicaid Agency to survey for and obtain approval from the federal Office of Civil Rights for participation in the federal Title XVIII or the state Title XIX reimbursement programs.

To determine certification status of health facilities, the Division of Certification applies the federal regulations which DHHS promulgates. If applicable, local and state requirements such as compliance with certificate of need and licensure regulations are used during certification visits.

Table 9-1 gives the number of health care providers which participate in each program. With a few exceptions, the facilities and agencies that participate in one program also participate in the other. Freestanding intermediate care facilities are eligible for Medicaid but not Medicare. Some health care providers elect to participate in only one program.

TABLE 9-1
MEDICARE/MEDICAID PARTICIPANTS
1982

Facilities/Agencies	Medicare	Medicaid
Hospitals	138	134
Skilled Nursing Facilities	187	189
Skilled Nursing Homes with ICF Certification		185
Intermediate Care Facilities (ICF)		18
Intermediate Care Facilities for the Mentally Retarded (ICF/MR)		5
Home Health Agencies	100	96
Independent Laboratories	49	49
Rural Health Clinics	13	13
Renal Dialysis Facilities	22	
Rehabilitation Centers	10	
Independent Physical Therapists	25	
Portable X-ray	2	
Chiropractors	265	

Since the decrease in federal funding on October 1, 1981, the division has adjusted activities to compensate for the reduction in work load and expenses. Except for Joint Commission accredited hospitals, independent physical therapists and chiropractors, the division had previously surveyed health care providers at least annually to determine if they continued to be eligible for Medicare/Medicaid participation. Because of the cut back in funds, the division established a priority schedule for surveying based on the type of facility or agency and its past record of compliance with regulations and quality of patient care. Some facilities might be surveyed at frequent intervals while others may be visited no more often than every two years. DHHS placed high priority on nursing homes because patient care can deteriorate rapidly when personnel changes occur.

Other cost saving measures included reducing the number of persons on survey teams and restricting travel. Also consultations to facilities have been reduced.

George Williams provides administrative consultation in a nursing home as a means of improving the quality of patient care.

Compliance Division

During 1982, 336 civil rights' reviews were conducted in hospitals, nursing homes and related facilities.

The Compliance Division actively assisted the Office for Civil Rights with 17 Title VI certifications based on new Medicare/Medicaid applications. Due to a change in procedure initiated by Health Care Financing Administration, the time frame for clearances from the Office for Civil Rights was lengthened considerably; however at the beginning of 1983, HCFA has agreed to revert to the previous procedures that should improve the time frame.

During 1983 emphasis will be on affirmative action plans for those facilities whose patient census is not in parity with the racial percentages of their service areas. Special attention will be given to referral sources as a means of obtaining minority referrals and possible admissions.

No formal Title VI complaints were filed with the Compliance Division in 1982. There were several instances where counseling was effective in dealing with compliance issues before formal complaints were filed.

Of the 190 nursing homes reviewed in 1982, 96 percent had a multiracial patient census; 3 percent had white patients only; and 1 percent had nonwhite patients only. Based on a one day census as obtained from each facility, 17 percent of the nursing home patients were nonwhite. This 17 percent indicates the effort required to achieve a patient census representative of the racial percentage of the state.

Table 9-2 gives a comparative occupancy percentage rate for alternate years since 1970.

TABLE 9-2
RACIAL PERCENTAGE OF NURSING HOME OCCUPANCY SELECTED YEARS 1970-1982

	Multiracial	White Only	Nonwhite Only
1970	52.0	43.5	4.5
1972	70.6	24.4	5.0
1974	85.0	14.0	1.0
1976	93.0	6.5	0.5
1978	96.3	3.1	0.6
1980	96.0	4.0	0.0
1982	96.0	3.0	1.0

Charles Graves inspects the housekeeping cart in a medical facility to ascertain that appropriate procedures are being utilized.

An activity director discusses with Becky Smith the types of programs and social activities that the nursing home makes available to patients to entertain them and to keep them alert.

Division of Field Services

The policy of reduced survey activities established in 1981 due to the sharp decrease in federal funding continued through the end of September. Full survey functions were resumed in October 1982. During the period of reduced activities, continued certification of facilities with a history of high level of compliance was administratively extended based on criteria provided by the Regional Office of Health Care Financing Administration. Follow-up assessments for deficiencies were accomplished by telephone.

Although field consultation visits were similarly curtailed, the staff were able to provide consultation in the division's office in an effective, but limited, manner. Consultation visits to providers have now been reinstituted, based on staff availability and work priorities.

During this calendar year, a significant increase in administrative work was generated by extensive change of ownership of hospitals and long-term care facilities.

A summary of field activities for calendar year 1982 follows in Table 9-3.

TABLE 9-3
FIELD SERVICE ACTIVITIES
1982

Facility Classification	Licensure Inspection	Certification Surveys	Post-Cert. Visits	Title VI Surveys	Consultation Visits	Complaints Special Inv.
Hospitals	92	188	22	121	—	25
Nursing Homes	326	481	155	190	62	187
Cerebral Palsy Treatment Centers	2	—	—	—	—	—
Domiciliary Care Facilities	9	—	—	—	—	1
Health Maintenance Organizations	1	—	—	—	—	—
Independent Clinical Laboratories	76	47	10	—	—	1
Maternity Homes	2	—	—	—	—	—
Rehabilitation Centers	10	10	2	—	—	—
End Stage Renal Dialysis Facilies	40	14	—	—	2	—
Home Health Agencies	—	93	3	25	—	1
Independent Physical Therapists	—	8	—	—	—	—
Mental Health Centers	—	—	—	—	—	—
Rural Health Clinics	—	21	4	—	2	—
Intermediate Care Facilities/ Mental Retardation	—	37	14	—	12	1
Unlicensed Nursing Facilities (Boarding Homes)	—	—	—	—	—	16
Abortion Clinics	22	—	—	—	—	4
Clinical Laboratories Improvement Act	—	4	—	—	—	—

Hearing Aid Licensing Division

To secure a license to select, fit and sell hearing aids, a person must demonstrate that he is qualified. The Hearing Aid Licensing Division administers the licensure examination each January and July. Table 9-4 summarizes licensure activities for the last five years.

TABLE 9-4
HEARING AID LICENSURE
1978-1982

Calendar Year	Regular License Renewals	Temporary Permits Issued	Passed Examination	Failed Examination
1978	106	40	12	1
1979	103	28	12	4
1980	98	27	15	4
1981	106	55	15	11
1982	111	44	11	9

The 1971 hearing aid dealers licensure law established a Board of Hearing Aid Dealers and set up the composition of it. In 1982 the expiration of terms of office created three vacancies on the board for which the Governor appointed replacements.

The Alabama Sunset Committee recommended and the Legislature concurred that the Board of Hearing Aid Dealers be continued. Act 82-146 modified the 1971 law in that the holder of a temporary permit to fit and sell hearing aids must pass the licensing examination by January 30 following the year of issuance. The temporary permit may be renewed once. The 1982 law also gives the board the authority to promulgate rules which define and regulate the ethical conduct of its licensees. Licensed audiologists in Alabama shall be issued licenses to sell and fit hearing aids.

Licensure Division

Inspections were conducted at all licensed health care facilities subject to inspections in accordance with

Marguerite Gonzalez, RN, inspects nursing care records in a nursing home to assure that the patients receive the physician ordered medication and care and that the records are properly documented.

applicable statutes. Results of the inspections were analyzed and recommendations for types of license to be issued were submitted to the Licensure Advisory Board. The board, after reviewing the recommendations, forwarded them to the State Committee of Public Health for action as appropriate.

The research project conducted jointly by Magnolia Haven Nursing Home and the Bureau of Licensure and Certification to see if it was feasible to operate an adult day care center in a nursing home was terminated by the facility. The nursing home stated that the current economical condition of the county made it financially impossible to continue the project.

One long-term care facility's license was revoked during the year when agency efforts to obtain corrections of the cited deficiencies were ignored. Since it had been determined that the health and safety of the patients were in jeopardy, the State Health Officer requested that a license revocation hearing be expedited. Subsequent to the hearing, the facility's license was revoked with the facility being given time to transfer the patients.

The task force assigned to study the reuse of disposable dialyzers completed its research and submitted the study to the Licensure Advisory Board and subsequently to the State Committee of Public Health. The committee after considerable review and further study decided to permit the reuse of disposable dialyzers with certain stipulations.

The bureau, with guidance from the Alabama Veterinary Association, began monitoring a pet therapy program in nursing homes. Fourteen nursing homes now have pet therapy programs for the benefit of patients.

The problem of unlicensed nursing homes continues. To improve the environment of people needing personal care and living in boarding homes, the bureau assisted the Interagency Coalition Council in developing a bill to be introduced in the Legislature to control board and care homes. The Legislature adjourned before the bill was brought up for a vote; however the need and the support were evident. An attorney general's opinion was subsequently requested and received indicating the bureau had the authority to license board and care homes. Work was begun to revise the domiciliary care facility rules to enable noninstitutional domiciliary care facilities to be licensed.

Initial licenses were issued to one rehabilitation center, two nursing homes, eight independent clinical laboratories, and three end stage renal dialysis facilities. In addition to applications for new license there were 39 name and ownership changes, 70 administrator changes, eight facilities closed, and licenses were reissued to 16 facilities for bed changes and to 33 for address or statutory changes. Table 9-5 provides a comparison at the beginning and ending of the year for those facilities licensed by the State Board of Health.

TABLE 9-5
LICENSURE OF HEALTH CARE FACILITIES
1982

Type of Facilities	Number of Facilities		Number of Beds		Gains/Losses	
	1/1/82	12/31/82	1/1/82	12/31/82	Facilities	Beds
Hospitals	138	138	20,851	20,998	0	147
General	129	129	19,880	19,921	0	41
Special[1]	9	9	971	1,077	0	106
Nursing Homes	213	215	21,214	21,465	2	251
Skilled Nursing Home	51	53	4,415	4,818	2	403
Nursing Home (Unskilled)	19	19	1,063	1,066	0	3
SNH/NH	143	143	15,736	15,581	0	155
Maternity Homes	2	2	70	70	0	0
Cerebral Palsy Treatment Centers	2	2	99	99	0	0
Domiciliaries	9	10	564	652	1	88
Independent Clinical Laboratories	72	74	N/A	N/A	2	N/A
Rehabilitation Centers	9	10	100	100	1	0
End Stage Renal Disease	14	17	N/A	N/A	3	N/A
Abortion Centers	11	11	N/A	N/A	0	N/A
Health Maintenance Organizations	1	1	N/A	N/A	0	N/A
TOTAL	471	480	42,898	43,384	9	486

[1] Types of hospitals designated as "specialized" are chronic disease, pediatric, eye and rehabilitation.

Plans and Construction Division

Building standards essential to quality patient care were maintained because the Plans and Construction Division's expertise in architecture, engineering and construction was utilized to ensure safe, functional, efficient health facilities. The staff of the division reviewed plans and inspected buildings to assure that health care providers comply with the regulations of the State Board of Health. The board prescribes necessary functional elements, establishes minimum requirements for patient environment, and requires that fire and safety codes are met. The division enforced these.

The division reviewed and inspected the construction of federally aided health projects. It made annual inspections, reviewed plans and performed follow-up work to enforce compliance with the Life Safety Code of the National Fire Protection Association since hospitals and nursing homes must comply to participate in the Medicare and Medicaid programs. During 1982, 150 Life Safety Code inspections and 145 follow-up visits were made to 29 hospitals, 196 skilled nursing homes, 18 intermediate care facilites, and five intermediate care facilities for the mentally retarded.

The division continued to provide architectural and engineering services to the State Health Planning and Development Agency.

Table 9-6 summarizes the construction activities which benefited from the expertise in the division.

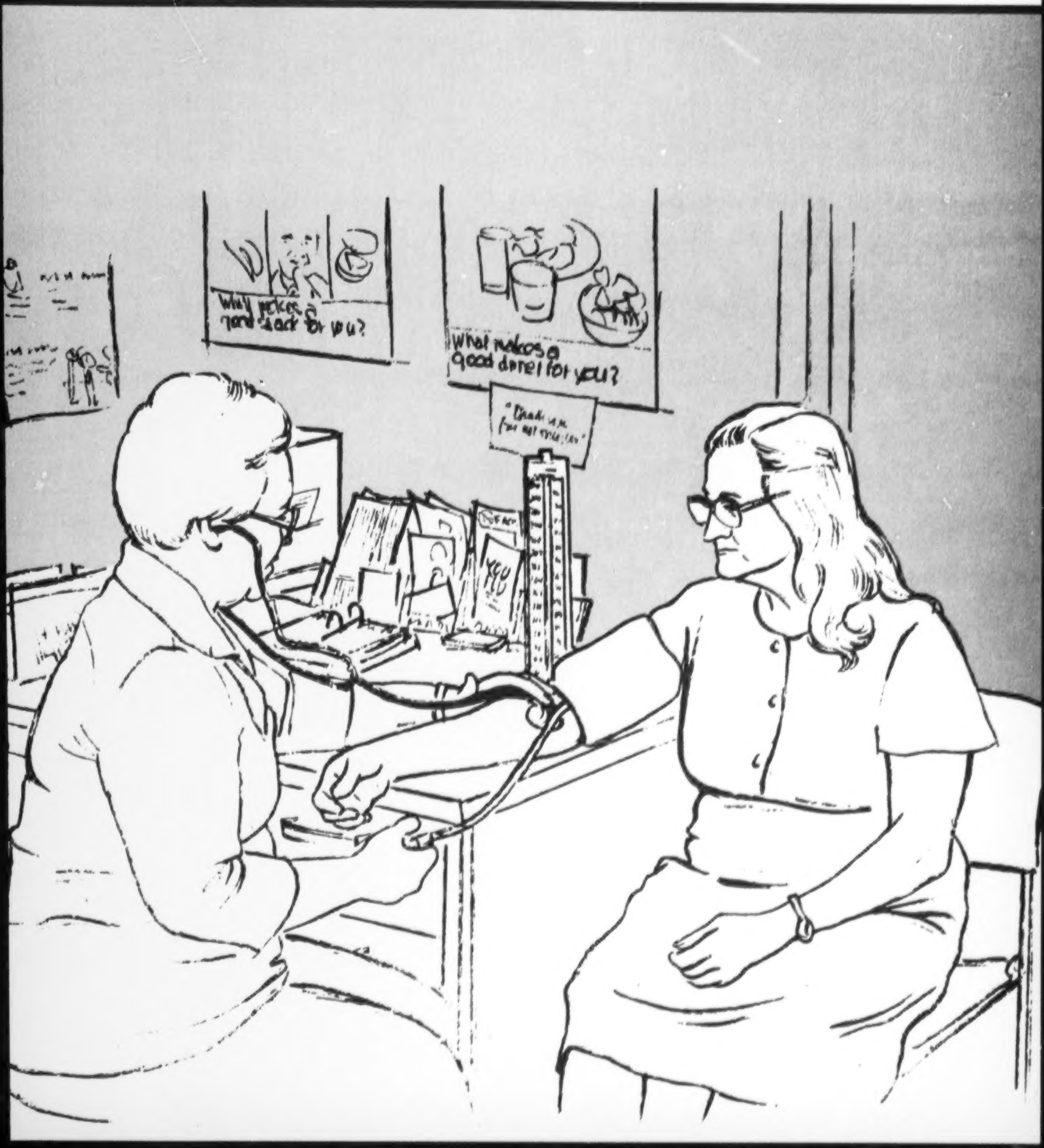
TABLE 9-6
HEALTH FACILITY CONSTRUCTION PROJECTS
1982

Type Facilities	Private Financing		Federally Aided	
	Facilities	Beds/ Stations	Facilities	Beds/ Stations
Projects Reviewed				
Hospitals	80	1,355	2	200
Nursing Homes	16	492	1	24
E S R D (Stations)	5	49	0	0
Other	3	0	8	0
Domiciliary	2	48	0	0
Projects Under Construction				
Hospitals	50	1,101	2	200
Nursing Homes	9	428	1	24
E S R D (Stations)	1	10	0	0
Other	0	0	8	0
Domiciliary	2	48	0	0
Projects Completed				
Hospitals	0	0	2	-1
Nursing Homes	10	234	0	0
E S R D (Stations)	2	16	0	0
Other	2	0	1	0
Domiciliary	1	45		0

Identification of Drug Products

Act 81-389, added to the *Code of Alabama* as Section 20-1-150 through 154, requires that solid oral dosage of prescription drug products which are distributed in Alabama be imprinted so that the drug product and the manufacturer or distributor are identified. The Health Department was given authority to promulgate rules for implementing the law. The Bureau of Licensure and Certification is the agency of the department to which inquiries and requests for exemptions are addressed. During 1982 drug manufacturers requested two exemptions and five temporary exemptions.

Bureau of Preventive Health Services


What makes a good snack for you?
What makes a good dinner for you?
"Thank you for not smoking"

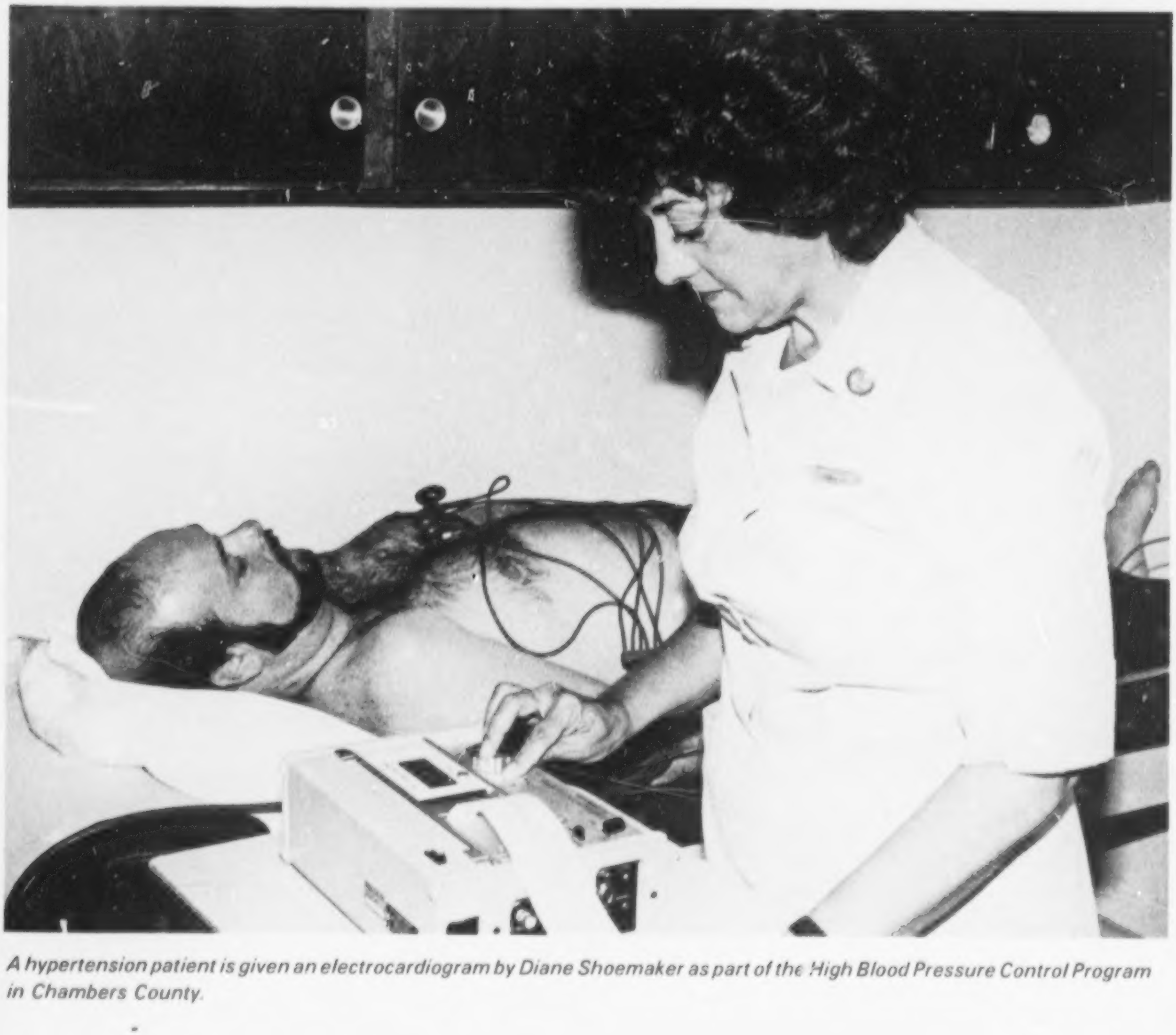
BUREAU OF PREVENTIVE HEALTH SERVICES

Division of Hypertension

Fiscal year 1982 was a period of adjusting for the Alabama High Blood Pressure Control Program. Two major challenges faced the program. One was to continue the highest quantity and quality of services possible despite a 14 percent budget decrease. The second was to assist staff through a decentralization process, again with the aim of continuing high levels of service delivery.

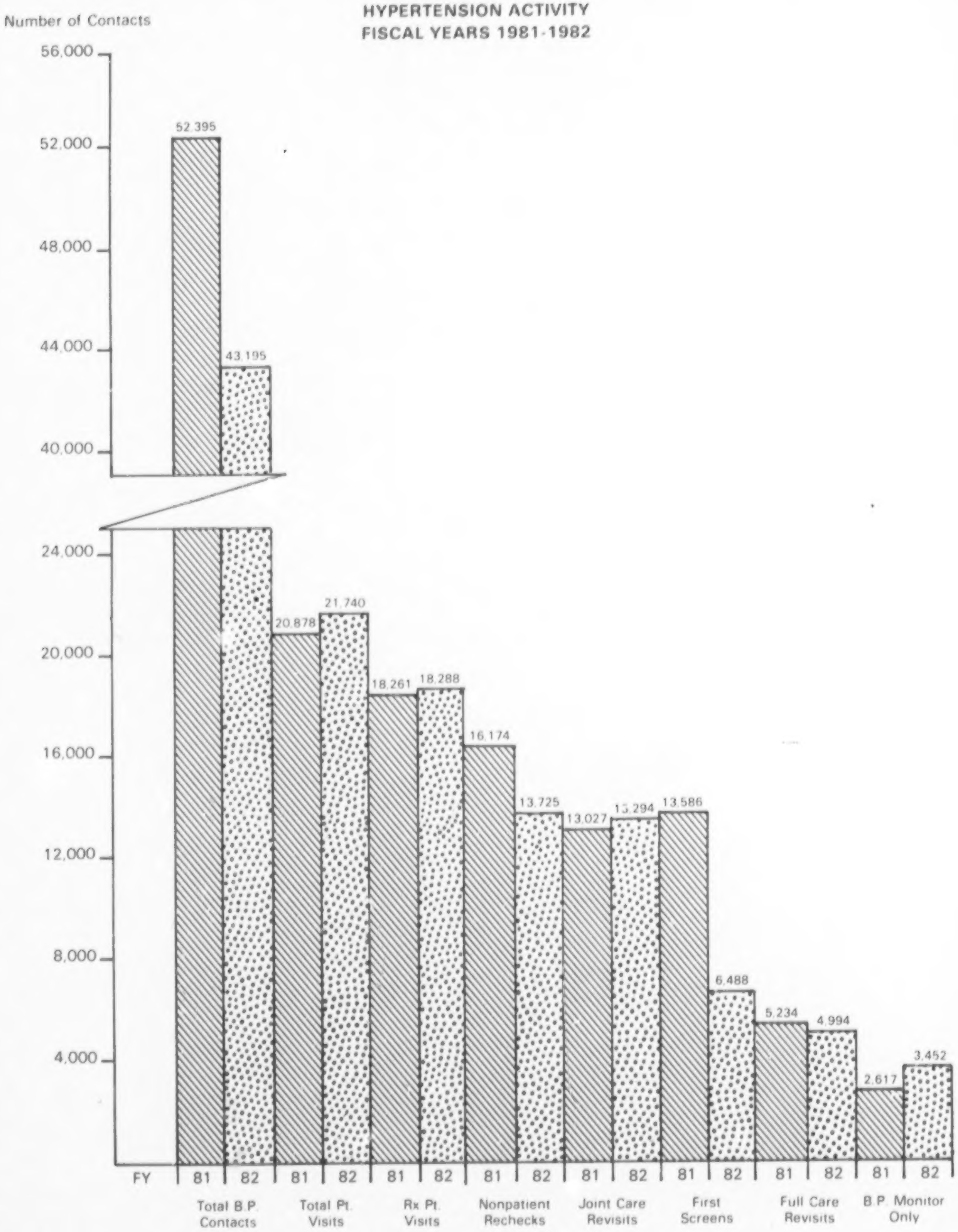
In terms of maintaining quantity of services, the program did surprisingly well in most areas, falling behind in some but exceeding fiscal year 1981 levels in others.

Areas in which the program exceeded last year's levels were total patient visits—21,740, medication patient visits—18,288, joint care visits—13,294 and blood pressure monitoring visits for nonmedication patients—3,452. Productivity levels fell, however, among nonduplicated first screenees, full care revisits and nonpatient rechecks. Fortunately the decrease realized in two of the three areas, screening and nonpatient rechecks, is not as significant as it might have been had it come in other areas. Another area where productivity fell was total blood pressure contacts with 43,195 visits, as compared to 52,395 in 1981. The major portion of this decrease came from 7,098 fewer nonduplicated first screenees. Screenings in some public health areas were de-emphasized in the process of decentralization. Graph 10-1 compares various services for 1981 and 1982 while Graph 10-2 shows two activities from 1975 to 1982.

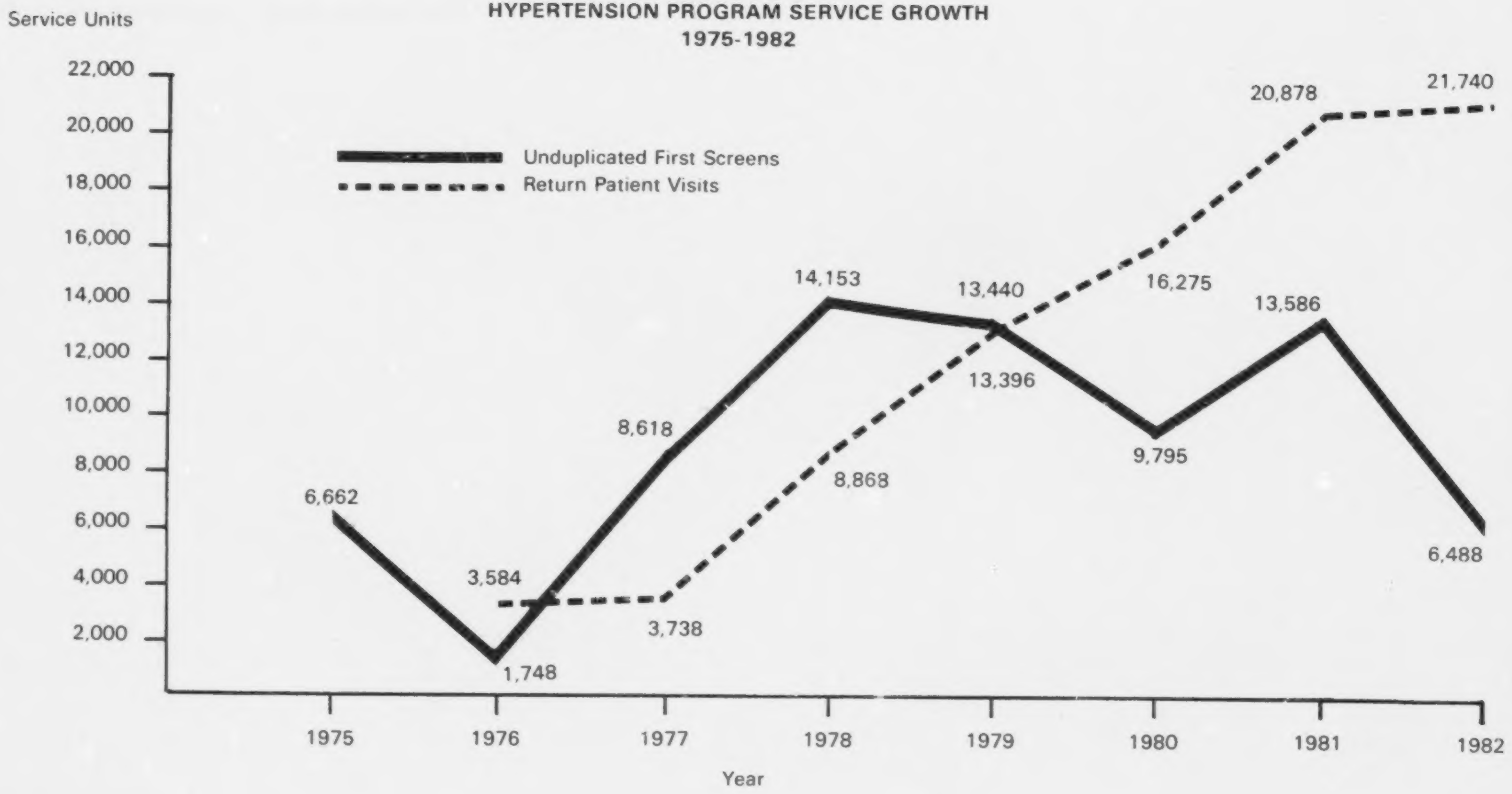


A hypertension patient is given an electrocardiogram by Diane Shoemaker as part of the High Blood Pressure Control Program in Chambers County.

GRAPH 10-1
HYPERTENSION ACTIVITY
FISCAL YEARS 1981-1982



GRAPH 10-2
HYPERTENSION PROGRAM SERVICE GROWTH
1975-1982



In terms of indicators of quality of care or program effectiveness, one benchmark is the percent of minorities, especially blacks, screened. The reason for this emphasis is the fact that blacks not only suffer from high blood pressure at twice the rate of whites, but the course of the disease is often more severe. During fiscal year 1982 the program's nonduplicated percentage of blacks screened increased to 33.5 percent, up from 31.7 percent in fiscal year 1981.

Another effectiveness indicator is the control level among program patients. In fiscal year 1982 the program experienced more controlled blood pressure visits (BP below 160/90) and a better percentage of controlled visits among medicated patients. During fiscal year 1982 there were 13,292 (72.7 percent) controlled visits as compared to 12,844 (70.3 percent) in 1981.

One set of program data, not to be confused with control levels among current program patients, is the level of control among screenees on medication. In 1982, 62.2 percent of the whites and 50.7 percent of the blacks on medication were controlled. These contrast with a 57.6 level among whites and 52.7 in blacks in fiscal year 1981, indicating the control level among screenees on medication improved among whites but decreased among the black population.

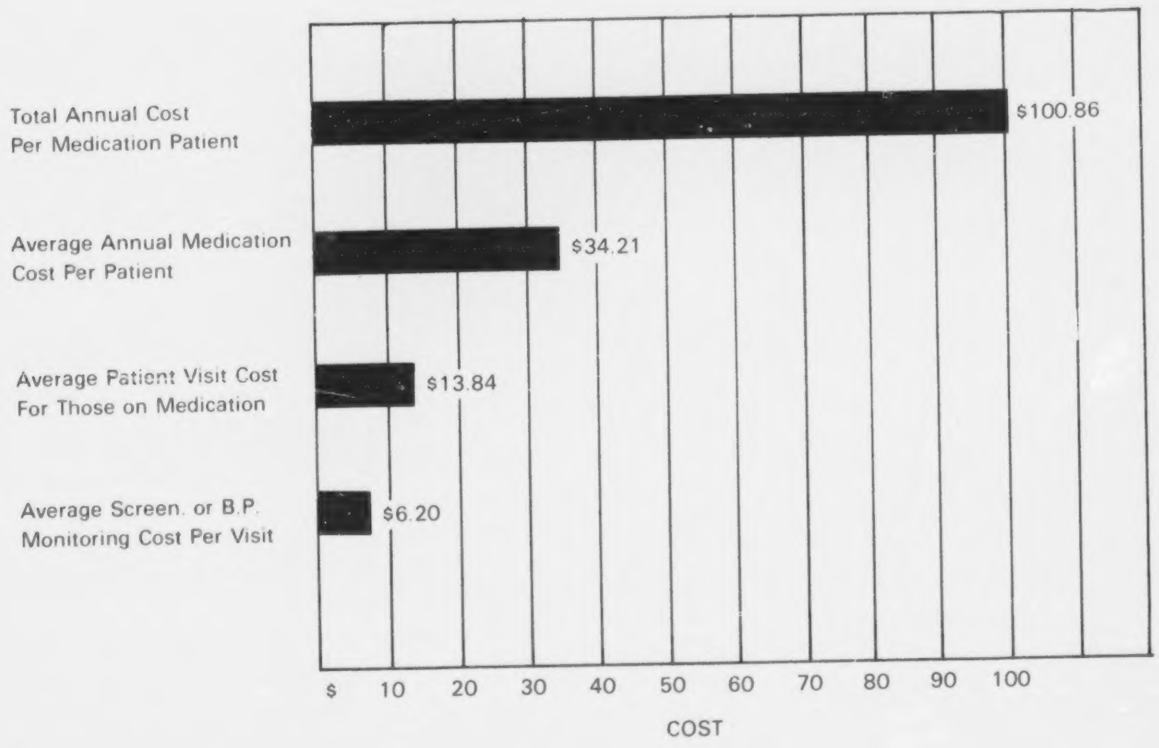
Also not totally encouraging was an increase in patient dropout rates from 14 percent to 20 percent. The entire increase, however, can be attributed to the fact that several patients no longer were program eligible according to new income guidelines imposed by one public health area.

In spite of slightly rising unit cost in 1982, the Alabama program continues to offer services on a much more economical basis than any program reported in the literature. Graphs 10-3 and 10-4 depict unit costs of services and distribution of costs for every $100 spent.

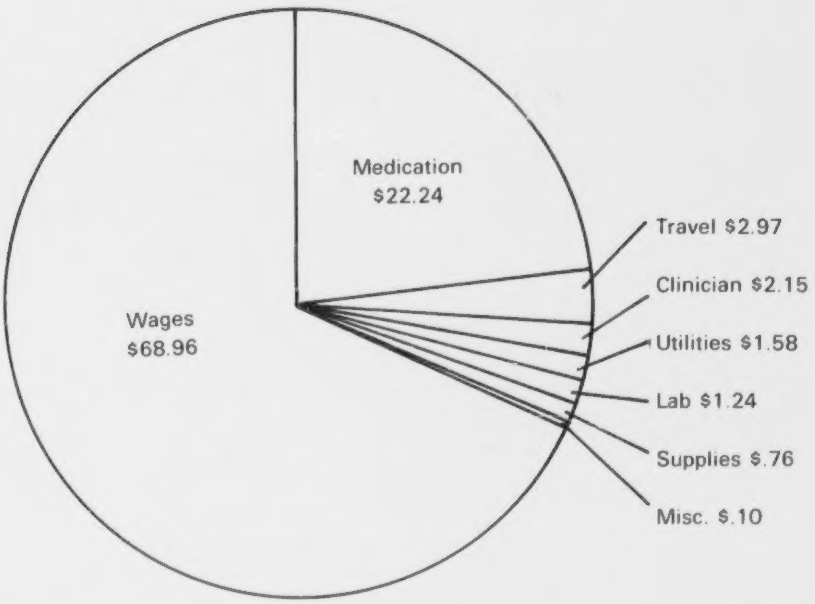
Considerable program savings began to be realized toward the end of the fiscal year when a new policy was approved regarding repeat intervals of electrocardiograms. Patients whose last EKG reading was normal would begin receiving one every other year instead of every year.

Low unit costs coupled with the 1982 evaluation by the

GRAPH 10-3
HYPERTENSION SERVICE COSTS
FISCAL YEAR 1982



GRAPH 10-4
DISTRIBUTION OF HYPERTENSION PROGRAM EXPENDITURES (FOR EVERY $100 SPENT) FISCAL YEAR 1982



consultants that this program rates low in adequate funding make the staff hopeful that the program will rate higher in new prioritizations.

At the beginning of the fiscal year, West Alabama Health Services, Inc., through the Alabama Department of Public Health, was awarded one of five minority hypertension education and control demonstration projects in the nation. This project received continuation funding from the federal government, but the State Health Department opted to discontinue funding for fiscal year 1983. National recognition also came to the program in two publications of the National Institutes of Health. These publications entitled *Patient Tracking for High Blood Pressure Control* and *Community Guide to High Blood Pressure Control* both featured elements of Alabama's program.

The Alabama High Blood Pressure Control Program promoted its activities statewide and responded to numerous requests for consumer and professional education materials. Highlighting the year was the promotion of High Blood Pressure Month in May, including cosponsoring a professional conference on hypertension. The theme for the 1982 conference was "Be Proud Out Loud." Also during the month several articles were submitted to newspapers around the state to inform the public of the latest advances in blood pressure control.

During the latter part of this year, the High Blood Pressure Task Force was appointed to make recommendations for future program activities. This type of consultative assistance, along with continuing program priority studies by the Alabama Department of Public Health, should be invaluable to the Hypertension Division in providing adequate resources and guidance in the proper focus of services.

Division of Immunization

Alabama continues to be ranked high among those states showing marked success in childhood disease prevention. The Division of Immunization rates maintenance of a measles-free state for an unprecedented second year as its greatest accomplishment in protecting the health of Alabama's young people during 1982. (Alabama has been free of indigenous measles for two years; i.e., a case which occurred within the state which could not be related to an imported case or where onset occurred more than two generations after an imported case to which it is epidemiologically linked.) Although two teenagers living in South Alabama contracted measles this year, epidemiologic investigation revealed that both had been infected out of state. No case spread occurred, pointing to the effectiveness of sustained high protective immunization levels in preventing disease.

Three surveys are conducted annually by the Division of Immunization to monitor these protective levels among children in various age/activity groups. Results of the 1982 school entrance survey (reported by county in Table 10-1) showed that for the third year in a row more than 98 percent of the children beginning their first year of school were adequately immunized and had a blue "Certificate of Immunization" on file. Several counties showed 100 percent compliance with the school law, and most children who were in apparent noncompliance had either medical or religious reasons for not being fully immunized. Furthermore random assessments of records for older school children indicated that immunization levels through grade twelve are approximately 98 percent statewide. Because schools historically have been implicated as the most frequent settings for outbreaks, Alabama's high level of immunity in kindergarten through the twelfth grade is considered the single most important factor in the virtual absence of disease.

As indicated in Tables 10-2 and 10-3 most children enrolled in licensed child care facilities were appropriately immunized for their age groups. Before the 1982 surveys were performed, it was feared that a new law exempting church associated centers from making reports to government agencies or complying with many health regulations would hinder access to their health records and result in lower immunization levels. However those few religious centers who were asked to volunteer information were most cooperative and results showed that their children continue to be adequately immunized.

For the second year in a row, results of the survey of two year old children's immunization levels reached 80 percent. Table 10-4 gives a breakdown by public health areas.

By keeping her children's immunizations current, this mother is protecting them from vaccine preventable diseases and the consequencies of having the diseases.

TABLE 10-1
SCHOOL ENTRANCE IMMUNIZATION SURVEY
1981 AND 1982

	1982				1981	
Public Health Areas	**Enrollment**	**Number with IMM-50***	**Percent with IMM-50***	**Ranking**	**Percent with IMM-50***	**Ranking**
PHA I						
Colbert	1,533	1,481	96.61	64	93.21	67
Cullman	1,614	1,594	98.76	35	94.52	66
Franklin	590	581	98.47	45	98.42	40
Jackson	1,523	1,509	99.08	25	98.45	39
Lauderdale	1,974	1,930	97.77	59	96.29	63
Lawrence	1,025	1,013	98.83	33	96.85	60
Limestone	1,368	1,357	99.20	20	98.05	49
Madison	5,565	5,393	96.91	63	98.24	44
Marion	791	784	99.12	24	98.91	27
Marshall	1,867	1,830	98.02	54	96.62	61
Morgan	3,482	3,411	97.96	57	98.52	35
Winston	663	660	99.55	9	99.32	13
PHA II						
Bibb	581	573	98.62	43	97.95	52
Fayette	525	520	99.05	26	99.23	18
Greene	603	595	98.67	40	99.52	10
Hale	613	611	99.67	8	99.29	16
Lamar	564	558	98.94	29	97.90	53
Pickens	783	778	99.36	15	98.13	46
Tuscaloosa	4,379	4,344	99.20	20	99.26	17
PHA III						
Blount	814	814	100.00	1	98.96	26
Chilton	890	890	100.00	1	100.00	1
Jefferson	20,615	19,687	95.50	67	97.32	57
St. Clair	1,393	1,377	98.85	32	96.44	62
Shelby	1,779	1,770	99.49	12	99.23	18
Walker	1,848	1,825	98.76	35	98.76	30
PHA IV						
Calhoun	3,190	3,126	97.99	56	98.24	44
Chambers	1,695	1,665	98.23	48	98.30	43
Cheroke	490	481	98.16	50	95.98	64
Clay	421	418	99.29	17	99.18	20
Cleburne	322	318	98.76	35	100.00	1
Coosa	292	285	97.60	60	99.66	6
DeKalb	1,227	1,204	98.13	51	98.47	38
Etowah	2,577	2,564	99.50	11	99.14	22
Randolph	534	528	98.88	31	98.60	33
Talladega	2,296	2,268	98.78	34	98.62	32
Tallapoosa	959	956	99.69	7	98.32	42

TABLE 10-1 (continued)
SCHOOL ENTRANCE IMMUNIZATION SURVEY
1981 AND 1982

	1982				1981	
Public Health Areas	Enrollment	Number with IMM-50*	Percent with IMM-50*	Ranking	Percent with IMM-50*	Ranking
PHA V						
Autauga	944	936	99.15	23	98.97	25
Barbour	913	907	99.34	16	99.66	6
Bullock	400	400	100.00	1	99.00	24
Butler	833	827	99.28	18	99.49	11
Coffee	1,389	1,379	99.28	18	99.72	5
Covington	1,101	1,079	98.00	55	98.04	50
Crenshaw	478	477	99.79	5	99.78	4
Dale	1,590	1,559	98.05	53	98.01	51
Elmore	1,575	1,545	98.10	52	98.56	34
Geneva	682	675	98.97	28	98.10	47
Henry	639	632	98.90	30	98.65	31
Houston	2,763	2,755	99.71	6	98.81	28
Lee	2,363	2,296	97.16	62	99.42	12
Lowndes	423	423	100.00	1	98.81	28
Macon	995	970	97.49	61	99.53	9
Montgomery	7,944	7,818	98.41	46	98.50	36
Pike	921	916	99.46	13	99.14	22
Russell	1,626	1,610	99.02	27	99.32	13
PHA VI						
Baldwin	2,447	2,416	98.73	39	99.17	21
Choctaw	590	582	98.64	42	99.30	15
Clarke	1,116	1,101	98.66	41	98.41	41
Conecuh	514	511	99.42	14	99.60	8
Dallas	2,148	2,072	96.46	65	97.74	56
Escambia	1,419	1,362	95.98	66	97.09	59
Marengo	791	777	98.23	48	100.00	1
Mobile	14,739	14,536	98.62	43	98.09	48
Monroe	989	973	98.38	47	97.81	55
Perry	482	476	98.76	35	98.49	37
Sumter	496	485	97.78	58	97.87	54
Washington	630	627	99.52	10	97.32	57
Wilcox	620	615	99.19	22	95.94	65
TOTAL	125,945	123,435	98.01	—	98.14	—

*IMM-50—Certificate of Immunization (at least 3 DTP injections, 3 polio doses, 1 measles, 1 rubella and 1 mumps)

Although these levels are above average nationwide, the Division of Immunization continues to be concerned that they are not higher. Improving these levels is the division's greatest challenge for the future. Most education projects developed during 1982 addressed this challenge.

During 1982 the hospital based immunization education program continued to be the most effective means of communicating with mothers of infants. In addition to statewide distribution of educational material to postpartum patients in over 100 hospitals, the program also included a redesigned mailer for receipt by selected mothers two to three months after the birth of their children. Approximately 12,000 mothers received this special message in 1982, a message designed to reinforce the importance of disease prevention to population groups who might not understand what and when immunization services are available or why immunizations are important for their babies early in life. Education programs such as this are becoming more important each year in the maintenance of the generally high immunization levels

TABLE 10-2
DAY CARE CENTER SITE SURVEY*
1982

	Percent Immunized				
	DTP	Polio	Measles	Rubella	Mumps
PHA I	93.9	92.7	93.9	94.1	94.1
PHA II	87.8	85.7	86.5	86.9	85.7
PHA III	98.2	98.2	98.2	98.2	98.2
PHA IV	91.0	90.6	91.7	91.7	91.7
PHA V	93.2	92.7	95.5	95.5	95.5
PHA VI	96.1	94.5	97.2	97.2	97.2
TOTAL	93.6	92.7	94.6	94.7	94.6

*This survey included on-site visit and immunization assessment of 237 day care centers. All 9,180 enrollee records were audited for having received recommended antigens according to age.

A total of 729 day care centers with 32,567 enrollees were assessed by either on-site visit or self-audit during 1982. This total represents 83.0 percent of all licensed day care centers operating in Alabama.

Because of an effective Immunization Program, vaccine preventable diseases are virtually controlled in Alabama.

TABLE 10-3
DAY CARE CENTER MAIL SURVEY
1982

	Centers Responding	Age Categories	No. Adequately Protected	Total No. Children	Percent
PHA I	64	< 2	408	417	97.8
		2-5	2,879	2,951	97.6
PHA II	32	< 2	147	154	95.5
		2-5	1,149	1,212	94.8
PHA III	117	< 2	700	736	95.1
		2-5	4,648	4,880	95.3
PHA IV	62	< 2	248	273	90.8
		2-5	2,262	2,330	97.1
PHA V	110	< 2	535	556	96.2
		2-5	4,195	4,385	95.7
PHA VI	107	< 2	576	599	96.2
		2-5	4,705	4,894	96.1
SUB TOTAL		< 2	2,614	2,735	95.6
		2-5	19,838	20,652	96.1
GRAND TOTAL	492		22,452	23,387	96.0

Total Licensed Centers	878
Respondents	492
Percent Respnding	56.0

TABLE 10-4
IMMUNIZATION LEVELS OF TWO YEAR OLDS
1981 AND 1982

	1982						1981
	Percent Immunized					Percent Totally	Percent Totally
	DTP[1]	Polio[2]	Measles[3]	Rubella[3]	Mumps[3]	Protected[4]	Protected
PHA I	87.2	85.9	89.7	88.5	85.9	76.9	82.7
Tri-County Health District*	92.6	90.1	96.3	95.1	95.1	85.2	76.0
Northwest Al Health District*	88.4	84.9	89.5	88.4	87.2	75.6	88.3
Madison County*	91.8	83.6	87.7	87.7	83.6	72.6	88.9
PHA II	87.5	85.8	78.3	78.3	78.3	75.8	75.0
Tuscaloosa County*	90.0	88.2	81.8	81.8	81.8	78.2	68.7
PHA III	92.2	88.4	89.1	88.4	89.1	82.9	92.8
Jefferson County*	95.1	91.1	93.5	92.7	92.7	87.0	91.5
PHA IV	88.3	86.7	85.0	85.0	84.2	78.3	83.7
PHA V	93.6	92.8	91.2	91.2	91.2	84.8	72.9
Montgomery County*	85.7	84.9	80.2	80.2	80.2	76.2	74.8
PHA VI	85.6	82.4	84.0	84.0	84.0	77.6	73.0
Mobile County*	86.5	83.8	84.7	84.7	84.7	75.7	76.6
STATE 1982	89.5	87.3	87.5	87.2	86.8	80.2	
STATE 1981	91.5	84.4	89.3	89.2	89.1	80.5	

*Separate surveys were conducted in these metropolitan areas.

[1] 3 or more injections.

[2] 3 or more doses.

[3] 1 injection.

[4] 3 DTP, 3 Polio, 1 Measles, 1 Rubella, 1 Mumps.

TABLE 10-5
VACCINE USAGE
1972-1982

Year	Diphtheria	Tetanus	Pertussis	Polio	Measles	Rubella	Mumps
1972	184,391	202,647	150,147	150,778	55,347	61,403	0
1973	168,519	184,163	138,804	147,626	46,068	47,948	0
1974	212,358	224,409	180,735	210,328	59,597	62,252	0
1975	197,090	209,602	170,609	194,778	50,614	51,106	0
1976	183,982	196,174	154,401	173,260	43,299	43,535	0
1977	202,468	213,344	172,820	191,293	45,247	42,939	15,053
1978	321,452	333,889	164,901	336,955	125,833	64,322	219,676
1979	208,248	208,248	155,379	160,466	79,862	61,844	96,263
1980	356,499	356,499	175,325	311,826	152,989	161,307	219,731
1981	187,738	187,738	156,600	183,040	42,759	43,889	46,494
1982	184,378	184,378	159,521	175,536	42,311	42,608	42,908

already achieved and the attempts to improve levels among selected population groups.

Certificates of immunization or exemption have been used effectively for several years in Alabama as proof of compliance with the immunization regulations pertaining to school attendance. When a child completes the required series of three doses each of diphtheria, tetanus, pertussis, and polio vaccines and one dose each of measles, mumps, and rubella vaccines, he is given a blue "Certificate of immunization." Some of the other states who have adopted a K-12 law require that the actual dates of vaccination be recorded on their certificates. To facilitate school enrollment of children transferring from Alabama to other states, a revised certificate was approved by the State Committee of Public Health. It will be used beginning in 1983.

Morbidity for all seven vaccine preventable diseases remained low in 1982. Sporadic cases of pertussis, rubella and mumps were reported from isolated areas of the state but no epidemics occurred. Table 10-5 shows how much public health vaccine has been administered during the last ten years, pairing once again Alabama's high immunization levels with low incidence of disease.

Tuberculosis Division

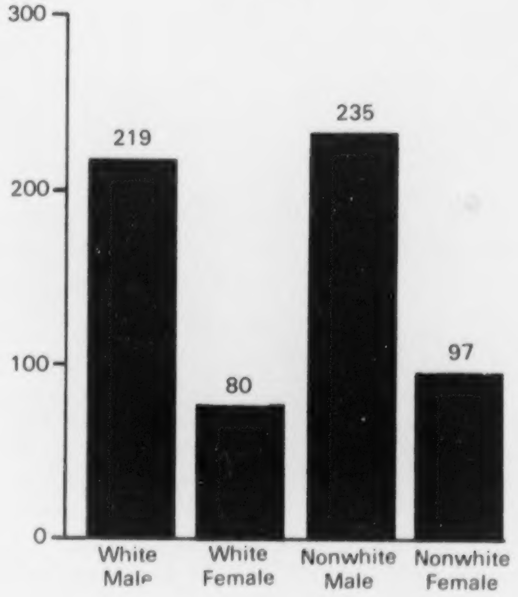
The 631 new cases of tuberculosis reported in Alabama during 1982 represent an approximate 1.5 percent reduction from the 640 cases in 1981. Of the 631 new cases reported in 1982, 607 or 96.2 percent were confirmed by positive bacteriological findings. These new tuberculosis cases produced a 15.8 rate per 100,000 population for a 2.5 percent decrease from the 16.2 rate in 1981. Tables 10-6 and 10-7 as well as Graphs 10-5 through 10-9 give a detailed picture of new TB cases in 1982.

As Graph 10-10 shows, Alabama's case rate is still above the national average despite its downward trend. In 1982 Alabama reached an all time low in new cases and in rate.

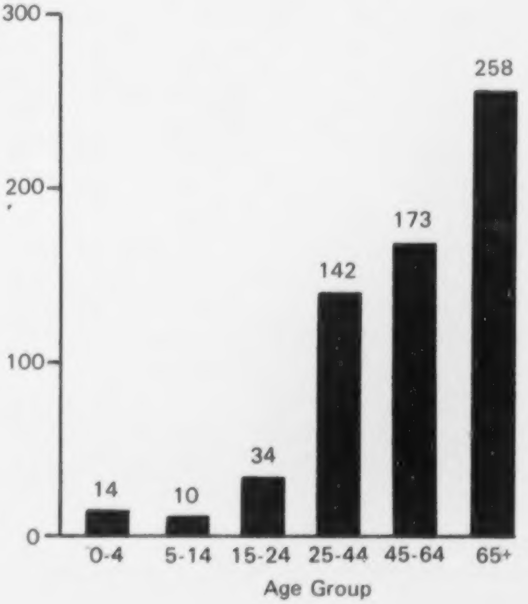
However based on the latest information from the Centers for Disease Control, Alabama ranked ninth in the nation in new tuberculosis case rates. In fact the Southeastern United States, or Public Health Services Region IV, reports more tuberculosis cases and has higher rates than any other region of the nation. The eight Southeastern states rank among the 12 states having the highest rates.

Table 10-8 reports the number of cases of pulmonary and extrapulmonary tuberculosis since 1965. Extrapulmonary cases represented 12 percent of all tuberculosis reported in 1982. Lymphatic and pleural cases

GRAPH 10-5
NEW TUBERCULOSIS CASES REPORTED BY RACE & SEX
1982



GRAPH 10-6
NEW TUBERCULOSIS CASES BY AGE GROUP
1982



GRAPH 10-7
NEW TUBERCULOSIS CASES BY AGE GROUP & SEX
1982

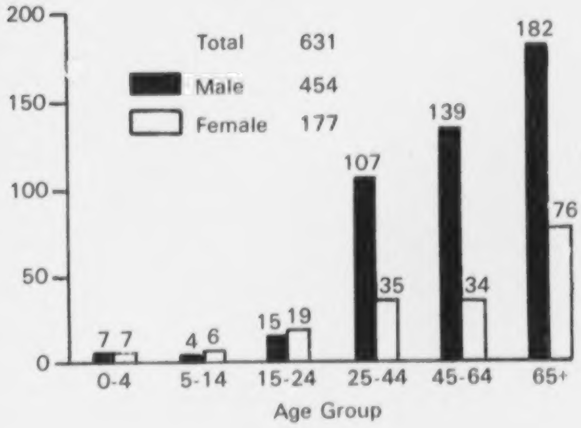


TABLE 10-6
NEW TUBERCULOSIS CASES BY RACE AND SEX
1960-1982

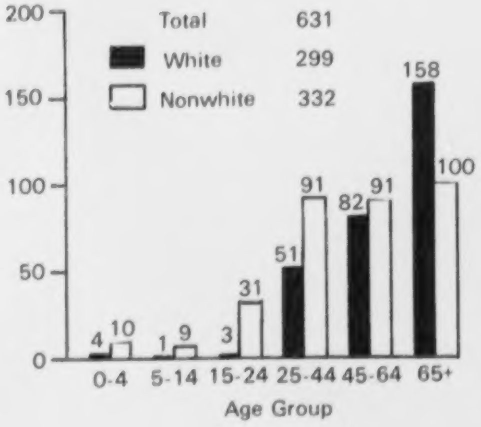
Year	Total	White			Nonwhite		
		Total	Male	Female	Total	Male	Female
1960	1,400	814	515	299	586	347	239
1961	1,357	718	478	240	639	369	270
1962	1,266	698	479	219	568	336	232
1963	1,326	716	478	238	610	385	225
1964	1,259	691	446	245	568	349	219
1965	1,417	748	525	223	669	413	256
1966	1,214	565	398	167	649	387	262
1967	1,379	618	423	195	761	463	298
1968	1,338	599	410	189	739	455	284
1969	1,203	508	353	155	695	421	274
1970	1,166	543	383	160	623	400	223
1971	985	455	319	136	530	321	209
1972	918	459	310	149	459	320	139
1973	790	361	244	117	429	288	141
1974	785	351	239	112	434	293	141
1975	780	354	237	117	426	289	137
1976	824	392	280	112	432	292	140
1977	704	314	214	100	390	269	121
1978	672	317	229	88	355	236	119
1979	644	308	204	104	336	220	116
1980	663	296	210	86	367	254	113
1981	640	316	224	92	324	227	97
1982	631	299	219	80	332	235	97

TABLE 10-7
ALABAMA TUBERCULOSIS CASES, CASE RATES AND RANK IN THE U.S.
1960-1982

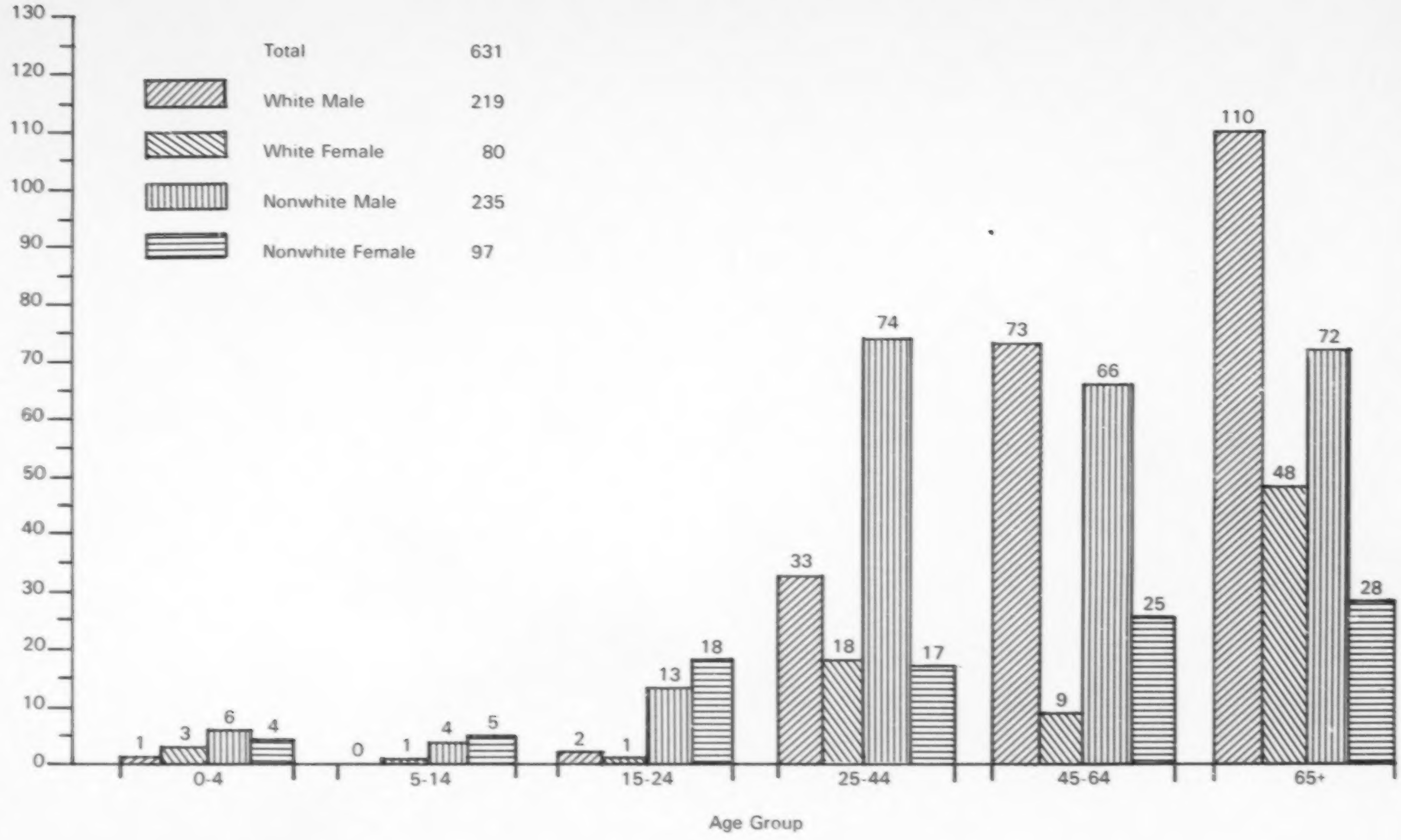
Year	Cases	Rate	Rank
1960	1,302	39.8	11
1961	1,313	39.5	10
1962	1,164	35.1	12
1963	1,326	39.3	7
1964	1,259	36.7	8
1965	1,417	40.6	3
1966	1,214	34.6	7
1967	1,379	38.9	3
1968	1,338	37.5	3
1969	1,203	33.0	3
1970	1,166	33.8	3
1971	985	28.4	3
1972	918	26.3	3
1973	790	22.6	5
1974	785	22.3	4
1975	780	22.1	7
1976	824	23.2	3
1977	704	19.7	9
1978	672	18.0	10
1979	644	17.0	9
1980	663	17.3	6
1981	640	16.2	9
1982	631	15.8	*

*Rank not available at this time

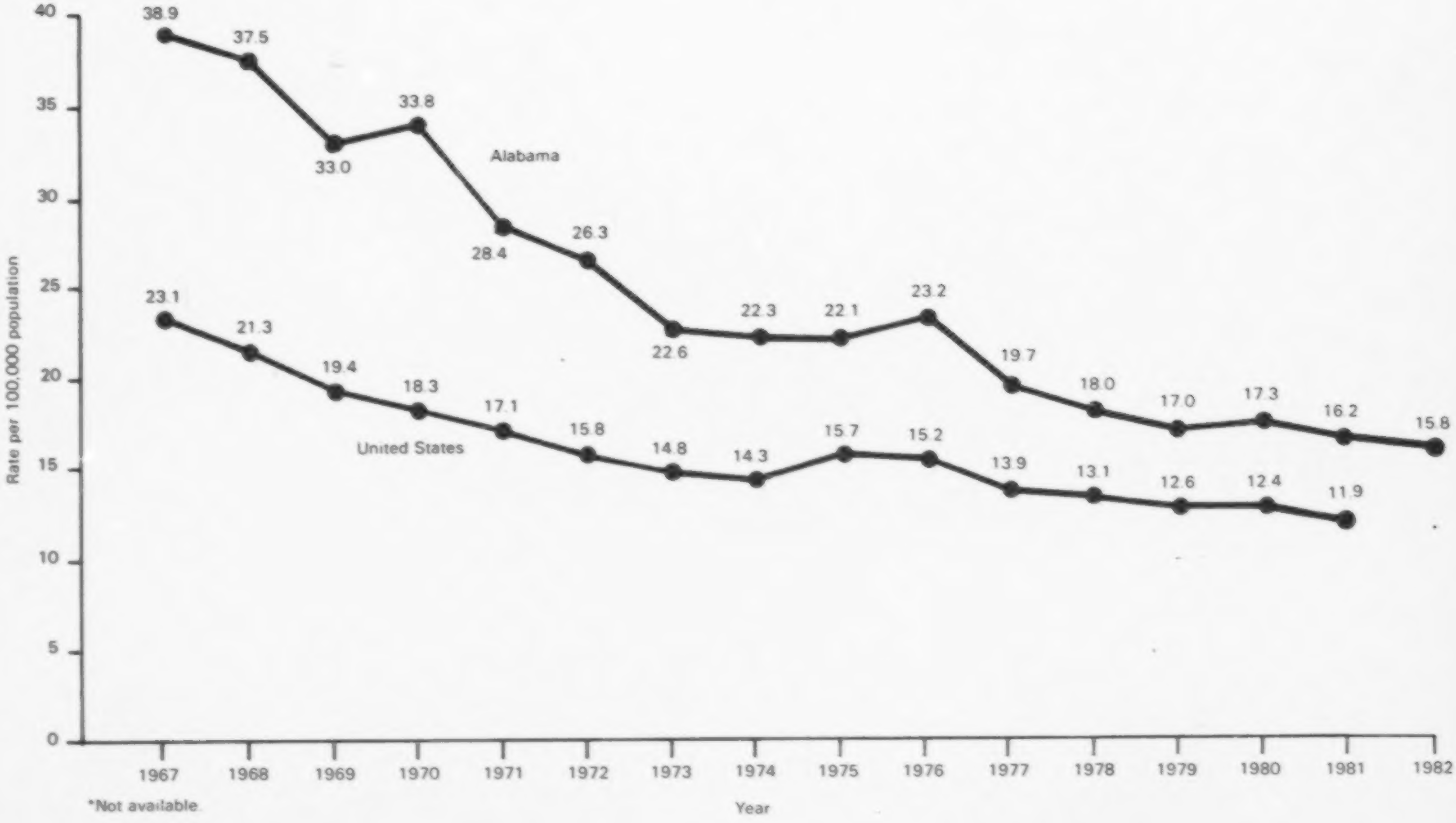
GRAPH 10-8
NEW TUBERCULOSIS CASES BY AGE GROUP & RACE
1982



GRAPH 10-9
NEW TUBERCULOSIS CASES BY AGE GROUP, RACE & SEX
1982



GRAPH 10-10
ALABAMA AND UNITED STATES
TB CASE RATES
1967-1982



*Not available.

TABLE 10-8
TUBERCULOSIS CONTROL DIVISION
PULMONARY & EXTRAPULMONARY CASES
1965-1982

Year	Pulmonary Cases	Extrapulmonary Cases	Total TB Cases Reported
1965	1,374	43	1,417
1966	1,162	52	1,214
1967	1,322	57	1,379
1968	1,281	57	1,338
1969	1,129	74	1,203
1970	1,111	55	1,166
1971	909	76	985
1972	859	59	918
1973	735	55	790
1974	721	64	785
1975	719	61	780
1976	760	64	824
1977	634	70	704
1978	601	71	672
1979	580	64	644
1980	599	64	663
1981	589	51	640
1982	556	75	631
TOTAL	15,641	1,112	16,753

comprised approximately half of the extrapulmonary cases. In addition six cases of tuberculosis meningitis were reported during the year.

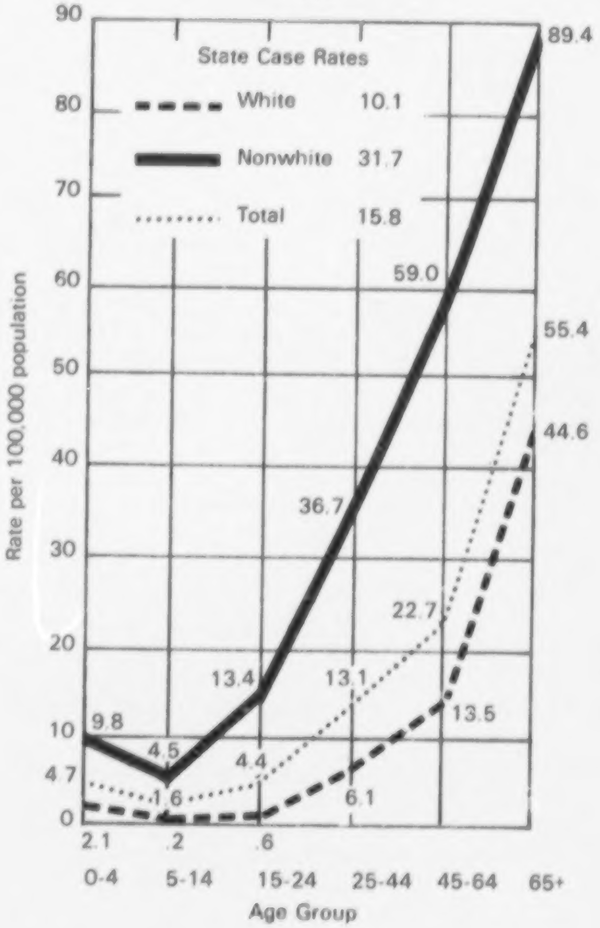
Although nonwhites constitute only 26 percent of the state's population, they account for 52.6 percent of the new cases of tuberculosis. Consequently the nonwhite rate of 31.7 per 100,000 population is more than three times the 10.1 rate for whites. More than 68 percent of the new cases were attributed to persons 45 years of age or older. Nearly 72 percent of the new cases of tuberculosis were diagnosed in males. In 1982 the case rates by race and sex were 48.6 for nonwhite males, 17.1 for nonwhite females, 15.1 for white males and 5.5 for white females. Nonwhite males were the only ones for which the rate and number of cases increased. Graphs 10-11 and 10-12 compare case rates by age and race.

Bullock County with 38.8 had the highest rate in the state. Marion County with 35.0, DeKalb County with 32.0 and Lawrence County with 29.2 followed. No new cases were reported in Coosa, Geneva, Lowndes and Wilcox counties. One item in Table 10-9 is the rank of each county.

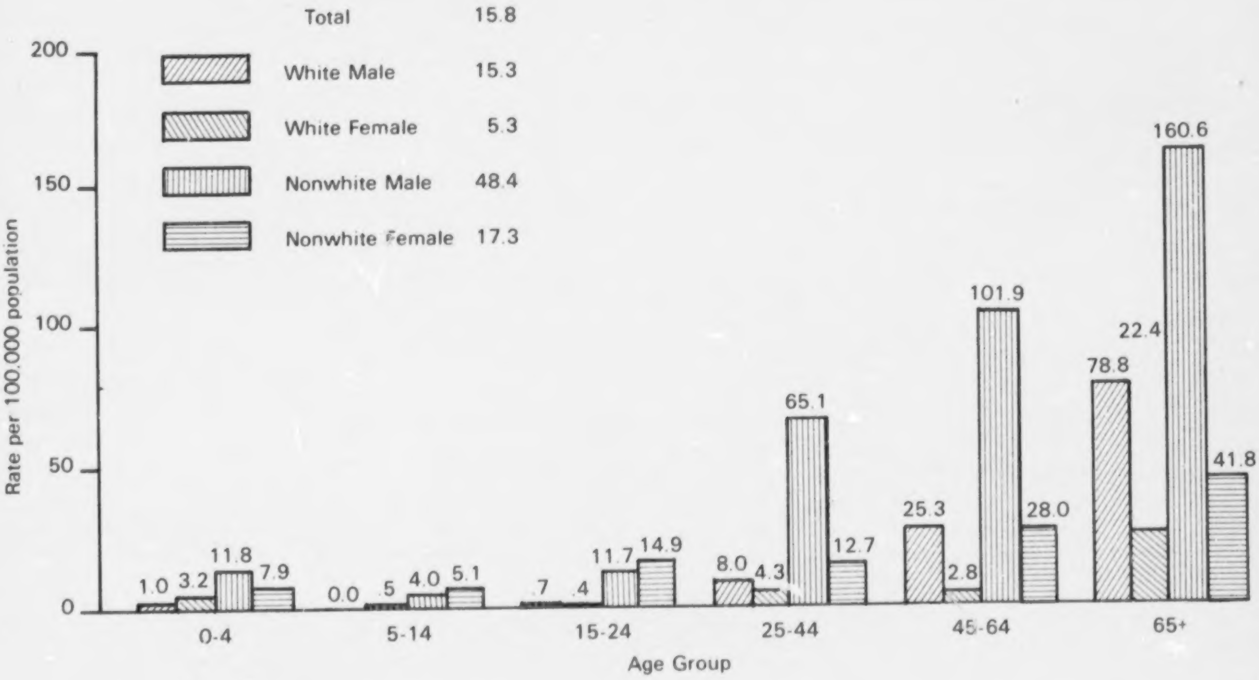
Dallas County which had the highest case rate in the state in 1981 dropped to twenty-first in 1982. Its case rate

John Parks performs a tuberculosis skin test.

GRAPH 10-11
NEW TUBERCULOSIS CASE RATES
BY AGE GROUP & RACE
1982



GRAPH 10-12
NEW TUBERCULOSIS CASE RATE BY AGE GROUP, RACE & SEX
1982



was 44.6 in 1981 but only 16.8 in 1982. This reduction resulted from intensifying tuberculosis activity and adhering to new short-course treatment guidelines. The county health officer, the area TB manager and the TB physician coordinator believe that individual case assignment and supervised therapy were also contributing factors in the progress made in Dallas County.

Dothan in Houston County reported a tuberculosis outbreak in 1981. In 1982 several new cases were reported in the epidemic area. Therefore additional intensified clinics were held in an attempt to stop the spread of infection and disease. Other TB physicians and field personnel were temporarily assigned to assist local staff in the problem area. All old and new cases were interviewed for previously unidentified contacts. The medical status was re-established for all known patients and contacts in the outbreak area. Finally all diagnosed cases and priority close contacts were placed on supervised therapy in an effort to bring the outbreak under control. By the end of the year, it appeared that this objective had been reached.

Jefferson and Mobile counties, with approximately 25 percent of the state's population, reported nearly a third of the new cases in 1982. Among 49 cities in the United States with 250,000 or more population, Birmingham ranked thirteenth in rate for new tuberculosis cases. Among 11 city/county areas in the nation with populations over 100,000, Madison, Mobile and Montgomery counties ranked second, third and seventh respectively in TB case rates.

Approximately half of the state's population lives in the ten Alabama counties which reported 60 percent of the tuberculosis cases. These counties are Jefferson, Mobile, Madison, Etowah, Tuscaloosa, Calhoun, Montgomery, Morgan, DeKalb and Lauderdale. The rates for new TB cases by public health areas are as follows: 16.6 in Public Health Area I, 17.3 in Public Health Area II, 16.2 in Public Health Area III, 17.5 in Public Health Area IV, 11.5 in Public Health Area V and 17.8 in Public Health Area VI. Table 10-9 gives details for each county by public health areas.

At the end of the calendar year, tuberculosis prevalence reports indicated that approximately 1,000 diagnosed cases, suspects and atypicals were receiving multiple drug therapy and medical supervision by county health departments and contract hospitals. By continuing to adhere to the contract hospital admission criteria and by utilizing outpatient clinics, the program was able to manage half of the new cases entirely on an outpatient basis. All cases completing nine to twelve months of INH and Rifampin therapy continued to be closed to medical supervision, provided sputum cultures were negative for at

TABLE 10-9
ALABAMA TB CONTROL
1981 AND 1982

	New TB Cases Reported		County Rank in No. Cases Reported	New TB Case Rate per 100,000 Pop.		Total TB Cases in File as of December 31		Population
	1981	1982	1982	Rate	Rank	1981	1982	July, 1982
PHA I								
Colbert	4	4	36	7.2	52	11	4	55,619
Cullman	3	6	27	9.4	45	4	7	63,712
Franklin	4	5	29	17.0	20	4	2	29,345
Jackson	8	6	26	11.1	39	9	5	54,154
Lauderdale	22	14	10	16.8	22	20	12	83,343
Lawrence	5	9	15	29.2	4	9	5	30,820
Limestone	16	7	24	14.9	25	13	8	46,975
Madison	42	33	3	16.6	23	52	29	199,313
Marion	3	11	11	35.0	2	2	9	31,447
Marshall	15	11	12	16.1	24	15	10	68,189
Morgan	7	19	8	20.4	13	13	14	93,140
Winston	3	4	34	17.1	19	6	3	23,146
TOTAL	132	129	3	16.6	4	158	108	779,203
PHA II								
Bibb	2	1	60	6.2	58	6	3	16,153
Fayette	0	1	62	5.2	60	3	3	19,385
Greene	1	1	55	9.0	46	3	2	11,104
Hale	3	1	59	6.4	56	6	2	15,541
Lamar	5	1	61	5.9	59	5	2	16,930
Pickens	6	5	28	23.0	6	6	6	21,742
Tuscaloosa	36	32	4	22.5	9	54	37	142,380
TOTAL	53	42	6	17.3	3	83	55	243,235
PHA III								
Blount	5	7	22	18.1	15	2	5	38,621
Chilton	4	2	52	6.3	57	6	6	31,834
Jefferson	128	120	1	17.7	18	139	68	677,248
St. Clair	10	10	13	22.6	8	8	11	44,186
Shelby	6	5	32	6.9	54	10	12	72,657
Walker	4	8	21	11.2	38	12	10	71,452
TOTAL	157	152	1	16.2	5	177	112	935,998
PHA IV								
Calhoun	22	28	5	22.7	7	18	19	123,511
Chambers	1	2	54	5.0	62	3	2	39,830
Cherokee	1	2	48	10.3	43	1	1	19,469
Clay	2	1	57	7.2	50	2	1	13,944
Cleburne	2	1	56	7.7	49	2	3	12,955
Coosa	2	0	64	0	64	2	0	11,539
DeKalb	7	18	9	32.0	3	5	8	56,286
Etowah	33	23	7	21.9	11	26	12	105,062
Randolph	2	2	49	9.8	44	2	0	20,467
Talladega	13	9	18	11.9	33	8	9	75,750
Tallapoosa	5	5	30	12.6	29	4	6	39,765
TOTAL	90	91	4	17.5	2	73	61	518,578

TABLE 10-9 (continued)
ALABAMA TB CONTROL
1981 AND 1982

	New TB Cases Reported		County Rank in No. Cases Reported	New TB Case Rate per 100,000 Pop.		Total TB Cases in File as of December 31		Population
	1981	1982	1982	Rate	Rank	1981	1982	July, 1982
PHA V								
Autauga	1	3	42	8.8	47	1	4	34,014
Barbour	1	2	50	7.9	48	2	2	25,253
Bullock	1	4	37	38.8	1	2	3	10,319
Butler	1	3	39	13.9	26	2	2	21,606
Coffee	3	2	53	5.1	61	4	2	39,357
Covington	4	4	35	10.7	41	8	6	37,473
Crenshaw	1	1	58	7.0	53	3	2	14,317
Dale	0	9	16	19.3	14	3	7	46,658
Elmore	3	3	43	6.6	55	6	4	45,579
Geneva	0	0	67	0	66	2	0	24,777
Henry	0	2	44	12.7	28	2	2	15,763
Houston	13	9	19	11.4	37	24	9	78,696
Lee	10	10	14	12.6	30	12	10	79,663
Lowndes	2	0	65	0	65	3	2	13,334
Macon	3	6	25	20.9	12	10	7	28,727
Montgomery	27	24	6	11.8	36	55	29	203,619
Pike	2	1	63	3.7	63	4	1	27,277
Russell	6	5	31	10.5	42	8	4	47,797
TOTAL	78	88	5	11.1	6	151	96	794,229
PHA VI								
Baldwin	7	9	20	10.9	40	12	12	82,869
Choctaw	6	3	38	17.8	16	6	3	16,895
Clarke	8	2	51	7.2	51	10	7	27,925
Conecuh	1	2	45	12.5	31	2	1	15,938
Dallas	24	9	17	16.8	21	39	16	53,684
Escambia	10	7	23	17.8	17	10	11	39,234
Marengo	3	3	41	11.9	32	4	5	25,324
Mobile	66	83	2	22.1	10	88	89	375,706
Monroe	0	3	40	13.0	27	1	3	23,049
Perry	0	4	33	26.8	5	1	6	14,926
Sumter	4	2	47	11.8	34	4	0	16,892
Washington	1	2	46	11.8	35	1	2	16,952
Wilcox	0	0	66	0	67	2	1	14,406
TOTAL	130	129	2	17.8	1	180	156	723,800
STATE TOTAL	640	631		15.8		822	588	3,995,043

least six months. Only complicated and drug resistant cases were negative for at least six months. Only complicated and drug resistant cases were recommended for alternative drug regimens and longer durations of treatment.

Of the total cases reported in 1982, county health departments reported 53 percent; private physicians reported 16 percent; and general hospitals reported 16 percent. Only seven cases, 1 percent, were reported as a result of death certificate information. Table 10-10 gives a breakdown of the sources reporting new cases of TB.

Subsequent to the initial diagnosis and reporting of cases, most patients were referred to county health department clinics for medical supervision and treatment. Also contact identification, investigation, examination and preventive treatment were provided by the clinic and outreach programs. Consequently nearly 95 percent of the known cases, contacts and suspects in the state received their medical supervision and treatment through public health clinics and contract hospitals.

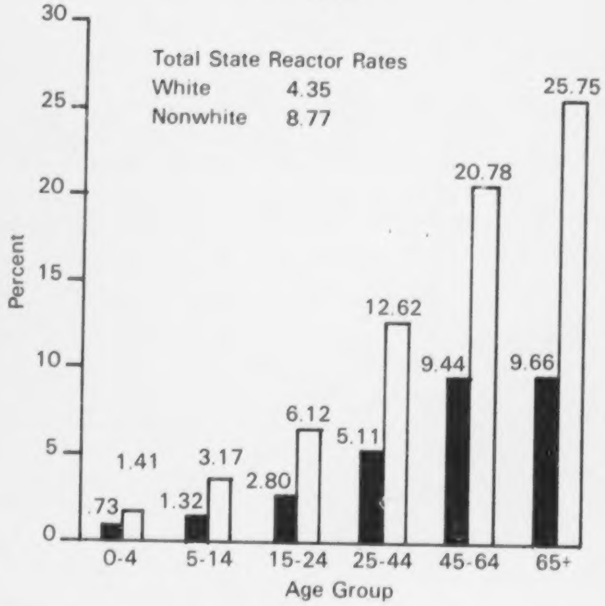
As a result of the private laboratory reporting law, 23 laboratories advised the Tuberculosis Control Division of 239 positive culture and 146 positive smear reports during the year. Follow-up investigation of these private physicians' positive reports resulted in the identification of 53 new tuberculosis cases. The 53 cases represented 8 percent of the total tuberculosis morbidity reported in 1982. Investigation of these reports enabled the Tuberculosis Program to assist the physicians in the treatment of the cases as well as to initiate epidemiological investigations, including examination and preventive treatment of contacts.

Lack of patient compliance in taking prescribed medication continues to be the greatest problem in tuberculosis control. For this reason supervised daily therapy and supervised intermittent therapy play a major role in tuberculosis treatment programs today. Currently efforts are made before initiation of therapy to determine which patients are likely to neglect taking the medicine because of problems with alcohol or other reasons. As a result nearly 25 percent of Alabama's known cases are on some form of supervised or observed therapy.

TABLE 10-10
NEW TB CASES BY SOURCE OF ORIGINAL REPORT
1982

Source	No. Cases	% of Total Reported
Penal & Mental Institutions	1	.2
General Hospitals	98	15.5
Veterans' Hospitals	21	3.3
County Health Departments	332	52.6
Out-of-State Health Departs.	0	0
Private Physicians	103	16.3
Death Certificates	7	1.1
Military	6	.9
Contract Hospitals	62	9.9
All Other Sources	1	.2
GRAND TOTAL	631	100.0

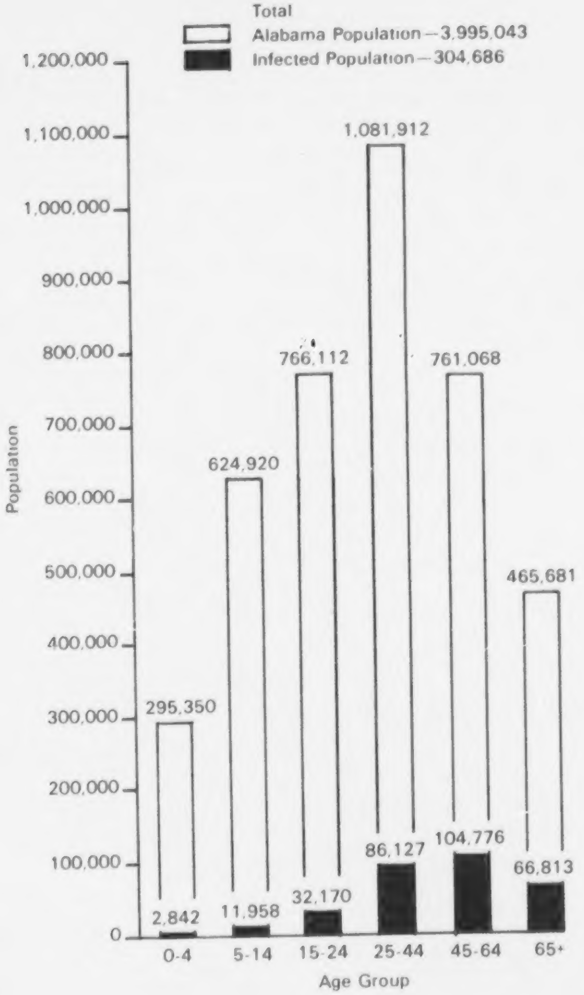
GRAPH 10-13
TUBERCULIN POSITIVE REACTOR RATE BY AGE GROUP AND RACE
1982



In 1982 county health departments performed 119,181 tuberculin tests. From the 79 percent read, 5,613 had results of 10 millimeters or greater for an overall reactor rate or infection rate of 5.94 percent. Positive tuberculin skin test rates ranged from a low of 0.99 percent for persons (including contacts) up to four years of age to a high of 13.1 percent for persons 65 or older. In 1982 the infection rate for close contacts was 38.0 percent, and for others the infection rate was 17.2 percent. Positive skin test rates among blacks continued to be twice as great as those of the white population. Graph 10-13 gives the reactor rates for various age groups by race. The state's infected population is estimated to be 304,686 individuals. It is predicted that 90 percent of the future tuberculosis cases in Alabama will come from these infected persons. Graph 10-14 gives the number of infected persons in each age group with the under 15 years of age being the low and the 45 through 64 years being the high.

The Tuberculosis Program stresses that the examination

GRAPH 10-14
TOTAL POPULATION AND PERSONS INFECTED WITH TUBERCLE BACILLI BY AGE GROUP
1982



for tuberculosis as a job requirement for food handlers and similar groups be given low priority. A few counties are still performing the skin tests because of tradition rather than legal requirements or effectiveness.

Other than contacts, the only persons required by law to be screened for tuberculosis are school employees. During 1982 legislation requiring this screening was modified. The major change in the law is that school employees be examined when they are initally employed only.

The 5,438 contacts and other high risk persons placed on INH preventive therapy bring the total to 126,637 started on the program since 1965. Only 480 or 0.3 percent of these nearly 127,000 individuals were later reported with tuberculosis disease. Of these 480 who had been recommended for 12 months of preventive therapy but later developed the disease, 73 percent took less than six months of preventive medication.

The Tuberculosis Control Division contracted with five general hospitals for the care of inpatients during 1982. One contract was transferred from Mountain View Hospital to Baptist Memorial Hospital in Gadsden. In addition a contract was negotiated beginning in October 1982 with Huntsville Hospital to take care of indigent patients requiring hospitalization in that area of the state. The contract hospitals reported 251 admissions, 258 discharges and 3,949 patient days. The average hospital patient stay was 15.3 days, and the average cost was approximately $206 per patient day. The state tuberculosis budget cost was $148 per day with third party insurance paying the difference. The average cost per patient hospitalized in 1982 was $3,638. Tables 10-11, 10-12 and 10-13 give several types of information related to contract hospital patients.

The Tuberculosis Control Division renegotiated a contract with the Board of Corrections for one bed for males at Kilby Correctional Facility and one bed at Julia Tutwiler Facility for females to be used as needed for recalcitrant patients. These facilities are used only for the extremely difficult, nonmotivated and noncomplying tuberculosis patient. For the division to use these facilities, the court must determine that the patient has infectious tuberculosis; and the patient must be declared a public health hazard to his family and the community. Patients are kept for a minimum of six weeks, and failure to report to the county health department clinic as recommended after discharge may result in the patient's being rehospitalized at the correctional facility. The contract serves primarily as a deterrent since only two patients were admitted under the program in 1982. The two patients remained a cumulative total of 124 days.

Sputum specimens are collected by the aerosol induced technique.

TABLE 10-11
ALABAMA
TUBERCULOSIS DIVISION
CONTRACT HOSPITAL INFORMATION
JANUARY 1982-DECEMBER 1982

Hospital	Admissions	Discharges	Patient Days	Average Pt. Stay
Baptist Memorial* Gadsden, Alabama	8	7	81	11.6 days
Cooper Green Birmingham, Alabama	57	57	891	15.6 days
Druid City Tuscaloosa, Alabama	59	62	1,090	17.6 days
Eliza Coffee Florence, Alabama	14	14	203	14.5 days
Huntsville* Huntsville, Alabama	3	2	42	21.0 days
Mountain View** Gadsden, Alabama	49	53	854	16.1 days
St. Margaret's Montgomery, Alabama	20	20	322	16.1 days
Univ. of So. Alabama Medical Center Mobile, Alabama	41	43	466	10.8 days
TOTAL	251	258	3,949	15.3 days
Board of Corrections	2	2	124	62.0 days

*October 1982—December 1982
**January 1982—September 1982

The State TB Medical Advisory Council developed and approved "Pediatric and Pregnancy Tuberculosis Treatment Protocols" during the year. The advisory council is presently developing new tuberculin skin testing guidelines for the state. The program is optimistic that the skin testing guidelines will be approved by the advisory council, the assistant state health officers and the State Committee of Public Health in 1983. In addition the TB physician coordinators are meeting with local medical societies and hospital staffs upon request in an effort to further professional education concerning the modern management of tuberculosis.

In 1982 the Jefferson County Health Department, through the leadership of the director of its Bureau of Communicable Disease, and the director of the Tuberculosis Control Division developed and conducted a two-day training course dealing with the current epidemiological aspects of tuberculosis. The course was scheduled four times, and 75 people, including all tuberculosis nurses, representatives, technicians and a few other public health workers, attended. Pretest and posttest information indicated that the training program was an overall success. The Tuberculosis Program is hopeful that the epidemiology model which is operational in Jefferson County can be approved and adapted statewide in the near future.

The Tuberculosis Division and the state TB laboratory continued to participate in a primary drug resistance study with the Centers for Disease Control. Alabama continues to have one of the lowest primary drug resistance rates (approximately 4 percent) among the 19 areas participating in the study.

In early 1982 Jefferson and Mobile county health departments began participating in a Short-Course TB Therapy Study with CDC. The study is designed to evaluate the effectiveness of a six month regimen compared to a nine month regimen of INH and Rifampin for the treatment of tuberculosis. The six month regimen consists of INH,

TABLE 10-12
CONTRACT HOSPITAL INFORMATION
OCTOBER 1, 1981-MARCH 31, 1982

Contract Hospital	Current Bed Allocation at $30 Per Day	Admissions	Discharges	Total Pat. Days	Average Patient Stay	Average Per Diem Cost	Total Hosp. Cost	Average Hosp. Cost Per Pat. Treated
Cooper Green Hospital Birmingham, Alabama	16	31	29	521	18.0	$264.93	$138,028.43	$4,759.60
Druid City Hospital Tuscaloosa, Alabama	10	18	22	235	10.7	297.49	69,909.59	3,177.71
Eliza Coffee Mem. Hosp. Florence, Alabama	2	7	7	76	10.9	194.21	14,759.95	2,108.56
Mountain View Hosp. Gadsden, Alabama	17	37	41	980	23.9	118.48	116,109.54	2,831.94
St. Margaret's Hosp. Montgomery, Alabama	5	6	5	97	19.4	330.18	32,027.21	6,405.44
University of South Ala. Medical Center Mobile, Alabama	8	16	17	224	13.2	309.76	69,386.01	4,081.53
TOTAL	58	115	121	2,133	17.6	$206.39	$440,220.73	$3,638.19
State Board of Corrections	1	1	1	35	35.0	—	—	—

TABLE 10-13
HOSPITAL PATIENT ADMISSIONS AND DISCHARGES
1972-1982

Year	1972	1973*	1974	1975	1976	1977	1978	1979	1980	1981	1982
Total Admissions	1,016	745	668	557	459	473	470	358	364	321	251
Total Discharges	1,095	1,016	738	547	512	465	482	357	364	331	258

*Beginning of General Hospital Contract Program

Pyrazinamide and Rifampin for two months followed by INH and Rifampin for the remaining four months. Birmingham and Mobile are among 14 areas participating in this high priority research project.

Activities of the Program Nurses—The tuberculosis program nurses continued to assist the county health departments with priority tuberculosis control activities. They also worked with private physicians, hospitals and other agencies in TB prevention and treatment programs.

These nurses made 2,242 visits to county health departments to participate in priority tuberculosis control activities. They provided nursing services in 465 TB outpatient clinics.

The nurses collected 5,737 sputum specimens by the aerosol induction technique and administered 7,981 Mantoux tuberculin skin tests.

The nurses made 723 home visits to tuberculosis patients and their families and 702 visits to nursing homes, schools, industries and private physicians while performing their tuberculosis control activities.

The program nurses conducted a total of 47 in-service programs which 699 people attended.

Activities of the Field Representatives—The priorities for field investigators continue to be cases at home, contacts of new cases, suspects and high risk tuberculin reactors.

During calendar year 1982 it was recommended that the investigators bring or return 11,461 cases, contacts, suspects and reactors to medical supervision. There were only 44 or 0.5 percent of these whom the field representatives were unable to locate.

The public health representatives made referrals of 3,213 cases, 3,743 contacts of new cases, 512 suspects and 3,993 reactors.

To obtain the current X-ray, sputum and treatment status of delinquent patients, the representatives visited 251 private physicians. Also they made 429 hospital visits as their part of the tuberculosis control activities. Representatives assisted in 903 county health department outpatient clinics. In addition they assisted in 67 special tuberculin testing and follow-up X-ray programs conducted in the state. They collected 2,695 aerosol sputa.

Of the 7,191 Mantoux tuberculin tests administered, 5,927 were by the Ped-O-Jet technique and 1,264 were with syringe.

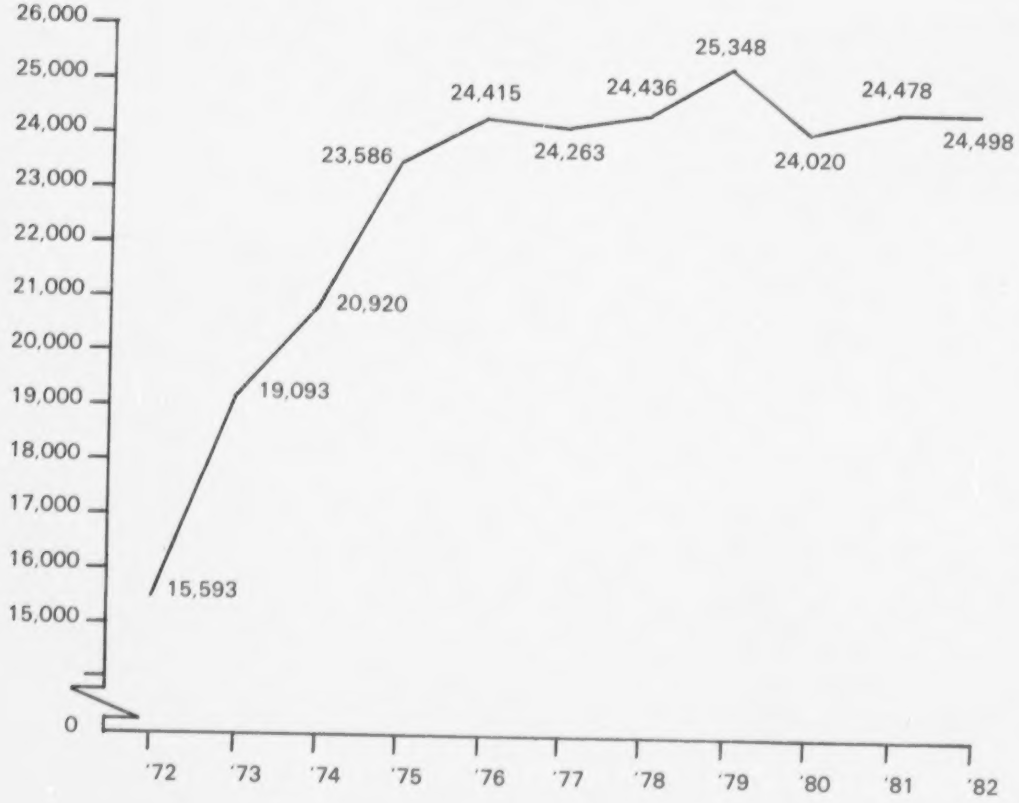
Activities of the X-ray technicians—During 1981 the X-ray technicians held 616 regular and outpatient clinics at the county health departments and performed 9,307 X-ray examinations. The technicians are responsible for maintaining all X-ray film files and performing minor repairs on all X-ray, sputum induction, skin testing and other related equipment on a statewide basis.

The technicians conduct field investigation activities pertaining to the supervision of tuberculosis cases, contacts, suspects and reactors. They also perform aerosol induced sputa examinations as needed.

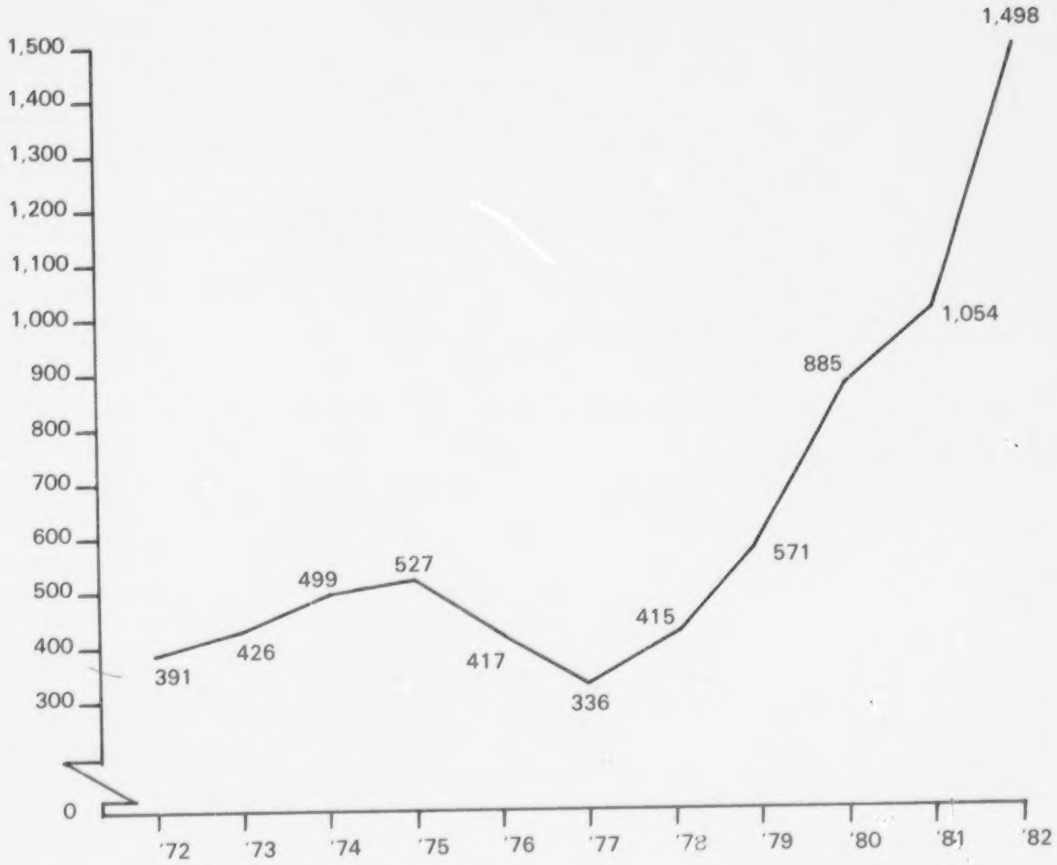
Division of Venereal Disease Control

Sexually transmitted diseases represent Alabama's most urgent communicable disease problem. The incidence of gonorrhea and its offsprings, gonococcal pelvic inflammatory disease (GPID) and penicillinase-producing *Neisseria gonorrhoeae* (PPNG, sometimes accompanied by

GRAPH 10-15
GONORRHEA MORBIDITY
1972-1982
(Excludes Military Cases)



GRAPH 10-16
SYPHILIS MORBIDITY
1972-1982
(Excludes Military Cases)



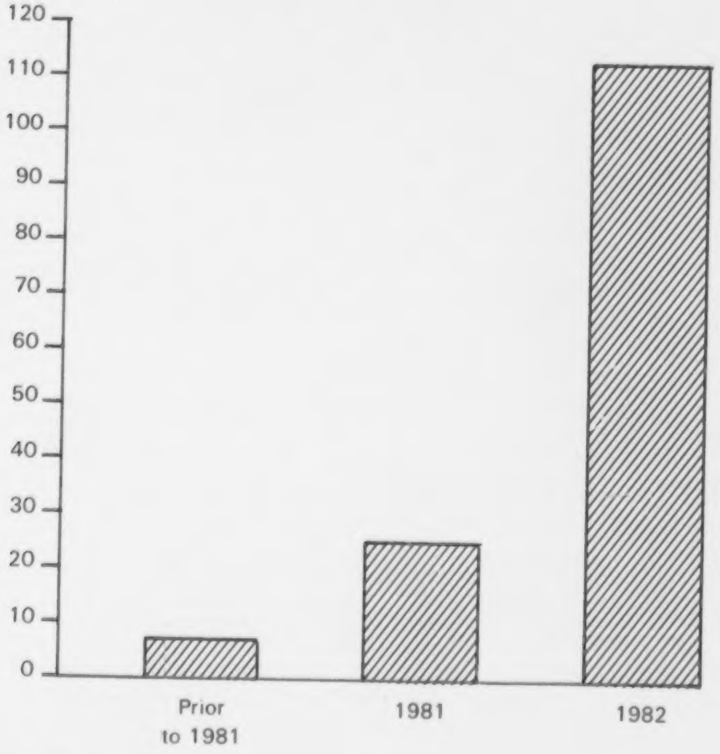
pelvic inflammatory disease prompted special epidemiologic attention by the VD Division. The continued increase in the incidence of infectious syphilis presented a real challenge to the control and prevention processes.

Gonorrhea resistant to penicillin therapy (PPNG) was the major issue during 1982. From only 25 reported cases in 1981, the number of cases in 1982 increased dramatically to 113 cases, an increase of 352 percent.

The increase in PPNG is of great concern. While most PPNG infections in the United States are considered related to people who have had sexual contact in the Far East (particularly military personnel), the outbreaks which occurred in Birmingham, Huntsville, Tuscaloosa, Mobile and some rural areas were not related to foreign travel or to military personnel. Out-of-state contacts in Georgia, Florida, Texas and Louisiana were also unrelated to these two sources.

Willie Collins draws blood for a syphilis test.

GRAPH 10-17
PENICILLINASE PRODUCING N. GONORRHOEAE (PPNG)
1981-1982
(Excludes Military Cases)



The increase in reported PPNG morbidity is also reflective of productive epidemiologic activities. Through decisive and rapid response to the situation, the VD Division, particularly in Mobile and Tuscaloosa, was able to control the PPNG outbreaks. All PPNG patients were interviewed, contacts were quickly located and treated, and infected patients were followed for test-of-cure. Of the 113 patients reported, 51 or 45.1 percent of those brought to treatment were either contacts or named suspects.

The Venereal Disease Control Division's gonorrhea epidemiologic activities are designed to: eliminate the consequences of sterility, ectopic pregnancy and hysterectomy resulting from gonococcal pelvic inflammatory disease; reduce the asymptomatic male and female reservoirs of infection which would ultimately reduce GPID; and reduce the overall cost of GPID follow-up and treatment.

In 1982, 575 cases of GPID were reported in Alabama. This represented a reduction of 15.2 percent from the 679 cases reported in 1981. Of the 575 cases reported, 528 were interviewed for sex contacts; and 676 contacts were determined to need examination. Of these, 144 were brought to treatment for gonorrhea with 62 or 43.1 percent having asymptomatic infections.

In Tuscaloosa County it was demonstrated that the epidemiologic processes regarding GPID control significantly reduced the overall cost of GPID follow-up and treatment. Over a three-year period, Tuscaloosa County experienced a reduction of 95 cases of GPID (from 170 cases to 75 cases), or a decrease of 55.9 percent. The annual savings realized by this reduction was approximately $34,000 either to the actual program costs or to Medicaid. (Up to one-third of GPID patients were Title XIX recipients.)

The epidemiologic pursuit of gonorrhea repeaters (those who became reinfected with gonorrhea within six months of initial treatment) has been proven to be beneficial in the prevention and detection of GPID and disseminated gonococcal infections. The investigation of the male repeater often leads to the discovery of a sex partner with a subacute GPID infection.

During 1982, 1,205 male and female repeaters were interviewed; 1,374 contacts were examined; and 467 (34 percent) were found to be infected. Of the infected contacts, 292 (62.6 percent) were asymptomatic.

The Gonorrhea Screening Program is another aid in the detection of gonococcal infections and the prevention of GPID. During 1982, 273,043 females were tested for gonorrhea; 11,975 were infected. These represent a 6.6 percent decrease in the number of cases detected when compared to 1981 data.

The incidence of infectious syphilis continued to increase across the state. Significant increases in primary and secondary syphilis can largely be attributed to four geographic areas of infection: Jefferson, Montgomery, Houston and Dallas counties. Reporting 275, 177, 80 and 30 cases respectively, these areas were of major concern and warranted the extraordinary efforts by the VD Division. Several public health representatives were dispatched to these counties to conduct intense investigations of each known case. Epidemiologic reviews and controls were diligently applied in order to stop the spread of the disease and to discover the sources of infection.

During 1982, 835 cases of primary and secondary syphilis were reported. These represent a 36.4 percent increase over 1981 during which 612 cases were reported.

Additionally the rate of early latent syphilis increased 43.6 percent (530 cases) over 1981 (369 cases).

Epidemiologic investigation of patients with a reactive serologic test for syphilis (STS) continued to be a vital mainstay of syphilis control activities. In 1982, 25,281 reactive STS were received in the syphilis reactor unit. Of these, 3,615 required follow-up with either the patient or the attending physician. Of those requiring follow-up, 422 primary, secondary or early latent cases were identified or brought to treatment as a result of epidemiologic activity. This represents an increase of 130 cases over 1981 during which 292 cases of primary, secondary or early latent syphilis were identified or brought to treatment through reactor follow-up activity. The detection of these additional cases can largely be attributed to the resumption of serologic testing for private physicians by the Clinical Laboratory Administration and the general increase in VD awareness by the public.

Realizing the importance of education in controlling venereal diseases, the information and education program complemented and supported other VD control measures. Like all support components, the information and education program was directed toward meeting program needs and addressing issues that further the VD intervention process. Not only was the division concerned with increasing the awareness of the general public, but also with communicating pertinent VD facts to people at risk.

Generally the educational message contained the following elements of importance: the seriousness of venereal diseases, the recognition of signs and symptoms, the consequences of repeated and untreated infections, and the methods of disease prevention.

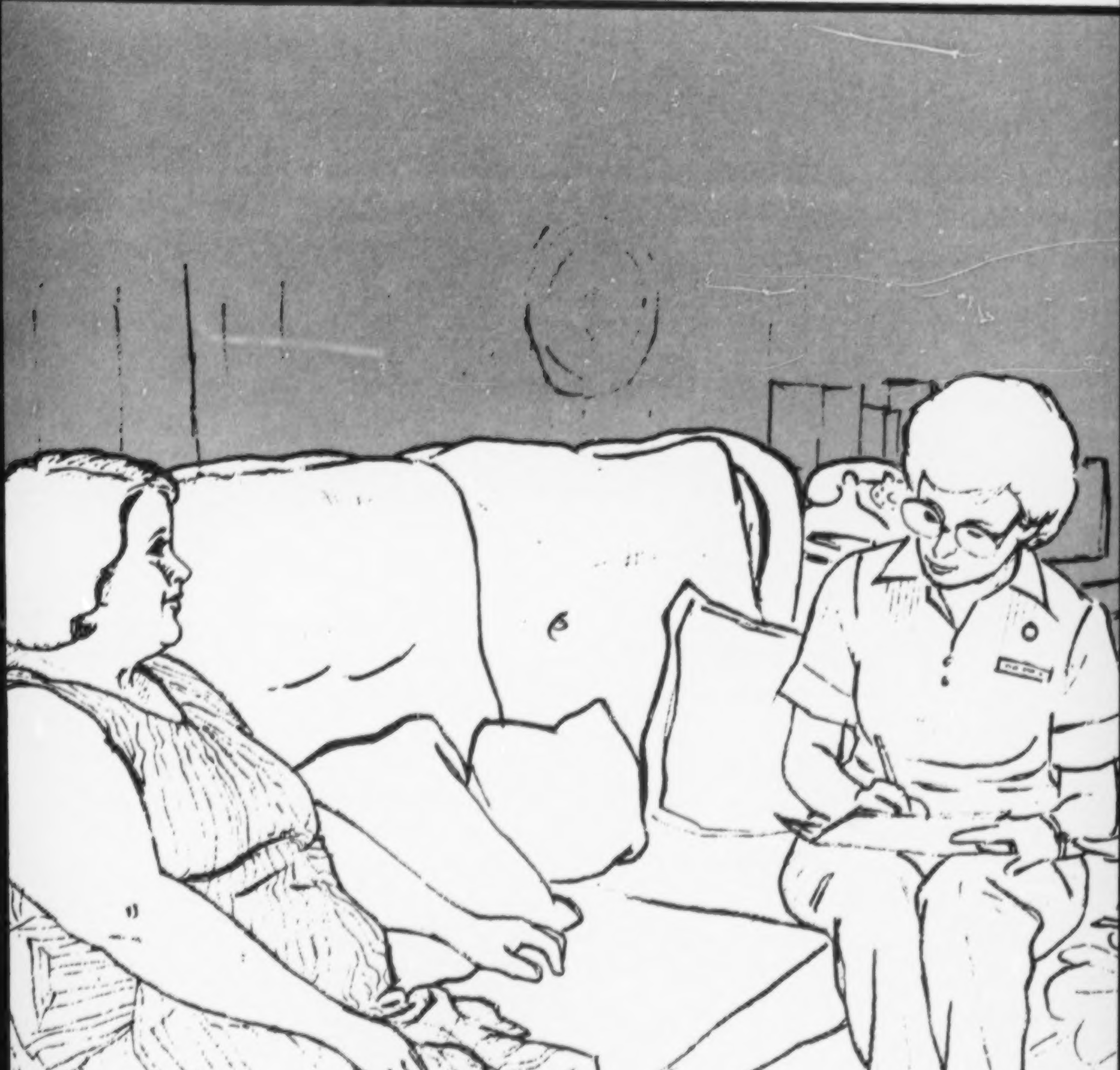
The information and education program was directed toward three target groups:

(1) Infected patients with the objective of preventing further exposure and influencing them to seek early medical care for themselves and their sexual partners. During 1982, approximately 32,547 patients received VD education through educational counseling or conditional contract interview sessions. Additionally the clerical and the investigative members of the division participated in workshops designed to facilitate patient education by addressing attitudes and behaviors which may adversely affect educational and epidemiological processes. Further efforts were made to promote VD education through the distribution and display of pamphlets and posters throughout the health departments.

(2) Providers who administer medical care to VD patients with the objective of elevating their level of disease suspicion and securing continued assistance in the epidemiologic process. Educational efforts directed toward this group have resulted in intense interests and responses by providers to the VD Division.

(3) The uninfected or possibly untreated infected member of the community at large with the objective of preventing disease or motivating individuals to seek medical attention if necessary. By utilizing various channels of communication, the division disseminated the educational message statewide. The increased demand by the public-at-large for more VD information was evidence that a greater awareness of and concern for venereal diseases has been achieved.

Bureau of Public Health Nursing



BUREAU OF PUBLIC HEALTH NURSING

The greatest change in the Bureau of Public Health Nursing occurred on August 1, 1982, the date on which decentralization of nursing became effective.

As a part of this change the public health nursing consultants were reassigned to public health areas as area nursing directors. In this capacity they are responsible for nursing programs within the respective areas and are directly under the area health officers for day-to-day activity. They still receive nursing guidance and direction from the Bureau of Public Health Nursing. Their performance evaluations are completed jointly by the area health officers and the director of the Bureau of Public Health Nursing. Five areas are functioning very successfully in this manner. One public health area has not yet appointed a nursing director. Decentralization of nursing personnel in special programs is proceeding, but naturally these changes cannot be accomplished overnight. Therefore the coordination and integration of services will continue to be a primary objective.

The area nursing directors have reported progress in the reorganization of nursing programs and improved utilization of nursing staff throughout the state. Some of the highlights follow.

In Public Health Area I the Madison County Health Department has reorganized, rearranged and redecorated rooms, clinics and office space. The morale of personnel has improved in direct proportion to the improvement of working conditions. Needless to say, patients react most favorably. Marshall and Morgan counties have already started the infant safety seat program and two other counties, Cullman and Limestone, are in the process of starting the program. The Tri-County District has an engaging T-shirt program for the 6, 12 and 24 month old children who complete their immunizations.

In Area II the support staff for nursing has been assigned to nursing for supervision and direction, thereby achieving a coordination of services that had not existed previously. Also Area II has generalized the nursing program so that nurses are assigned districts and all except the nurse practitioners are working in the generalized program. Accurate record keeping assures special program administrators that use of funds can be justified. Nurses assigned to their own districts have a greater feeling of responsibility and stay abreast of all nursing services. Travel is reduced, and fewer staff are required than for an all specialized staff. This latter is true due to the overlapping and duplication of services which are inevitable in families with multiple health needs and to activities which are necessary for coordinating the various specialized units. Morale has improved because all employees are equally busy.

The nursing director for Area III has been named project director for the Rural High Risk Pregnancy Project. This project enables the health department to provide expert obstetrical evaluation and medical testing for women in the maternity clinics who have certain high risk problems. This has been achieved through the nursing director's activity with the Regional Perinatal Advisory Committee. Much emphasis is also being placed on improving the supervisor's performance and on meeting the professional needs of the staff nurses.

WIC and tuberculosis programs are being integrated into the general program.

Much progress has been made in the nursing programs of Area IV. The nursing director is working closely with the area health officer and nursing supervisors to improve services. A number of meetings were held in order to achieve decentralization of the tuberculosis program by January 1, 1983. Most of the other programs are still operating as separate units. The Perinatal Infant Mortality Project is active in all 11 counties.

Public Health Area V has not appointed an area nursing director. The public health nursing consultant continues to function in the consultative role. Regular visits have been made to all health departments in the area to assist and advise in all aspect of nursing service. Although efforts have been made to coordinate programs, most nursing programs continue to be specialized. Coffee and Geneva counties have made outstanding progress in the home health agency program. All of the counties in the area seem to be putting much emphasis on this program. Houston County is carrying out a pilot project to determine the effectiveness of utilizing physical therapy assistants in home health. This is a collaborative effort between the Bureau of Public Health Nursing and the Houston County Health Department. If the project is successful, there will be some changes in the policies of the Division of Home Health Services.

The nursing activities for Public Health Area VI have been varied and productive during 1982. The nursing programs in all counties have increased when compared to fiscal year 1981. There has been an overall reduction in funding for some counties, but the nursing programs have continued to function appropriately even with the decrease in funding.

Some of the activities have focused on the need to improve the method of health care delivery. The Regional Perinatal Advisory Committee went on record early in the year in support of more adequate funding for prenatal care for the indigent population. Money was made available to local physicians who were interested in participating in the effort. The local health departments served as financial screening agencies and referred women who were in need financially to participating physicians for prenatal services. The program was a success and has been included as a budget item for the current fiscal year by the Regional Perinatal Advisory Committee. This same group funded the

"Child Health Assessment Update" in Mobile for public health nurses. This one-day workshop was a follow-up of a more comprehensive effort presented last year for nurses working in the child health program of county health departments. There have been efforts to develop further the Genetics Birth Defect Task Force in this area, and this group has met four times during the year. Plans are under way to begin a clinic in the area in 1983 to be staffed by the Genetics Birth Defect Center personnel from the Department of Medical Genetics of the University of South Alabama Medical Center.

In an effort to increase the overall utilization of the child health, maternity and WIC programs in local health departments, these programs are now being integrated in some counties.

The Infant Follow Along Program from the University of South Alabama Medical Center has been made available to county health departments. This program proposes to follow those babies who have been discharged from the Neonatal Intensive Care Unit once they return home. A clinic is conducted once every quarter in each county and is staffed by local staff nurses, a neonatologist, and a social worker from the University of South Alabama. This program has had a great deal of success and is truly a benefit to the area.

Frances Stewart, director of Home Health Services, checks records to determine that subunits are conforming to the guidelines for patient care.

Nurse Ruth Little, Clay County Health Department, monitors the blood pressure of a home health patient.

The Baldwin County Health Department received block grant funds to conduct an expansion project of the home health services program. This effort has resulted in an overall increase in the utilization of home health services.

There are currently 13 baccalaureate schools of nursing in the state. The Bureau of Public Health Nursing in collaboration with appropriate county health departments has contracts with eight of them for providing community nursing experience. In addition to these experiences, the bureau has provided preceptor experiences for several of the graduate students. The baccalaureate programs prepare the nursing student for public health nursing experiences, but the two-year nursing programs do not offer the theory of public health nursing; therefore a policy has been made that clinical experiences will have to be limited to the baccalaureate students. The two-year programs are offered a field trip with an explanation of public health programs and services.

The area nursing directors and professional staff of the bureau continue to represent public health nursing at the state and national level. Several serve as adjunct faculty members for baccalaureate schools of nursing throughout the state in an effort to coordinate nursing education and clinical practice in the field of public health nursing.

Fifty-six new nurses were employed in 1982. There were 44 full-time replacements, five new full-time positions, two temporary replacements, three part-time replacements and two new part-time positions. Two of the 48 resignations were nurse practitioners. There were three retirements during the year. Even though seven new positions were established, there was a gain of five nurses since two positions remained vacant.

Of the 439 nurses employed under the State Merit System, 50 were assigned to the state level, and 389 worked in the counties or districts. An additional 106 and 41 nurses were employed by Jefferson and Mobile counties respectively, which have separate merit systems.

The Bureau of Public Health Nursing continues to emphasize academic preparation. In 1982, 24 percent of the State Merit System nurses had training beyond diploma status. The percentage increases to 29.4 when Jefferson and Mobile counties are included. In the three merit systems 41 nurses were nurse practitioners, and one was a nurse midwife. An additional 110 nurses had baccalaureate degrees, and 20 had master's degrees.

Division of Home Health Services

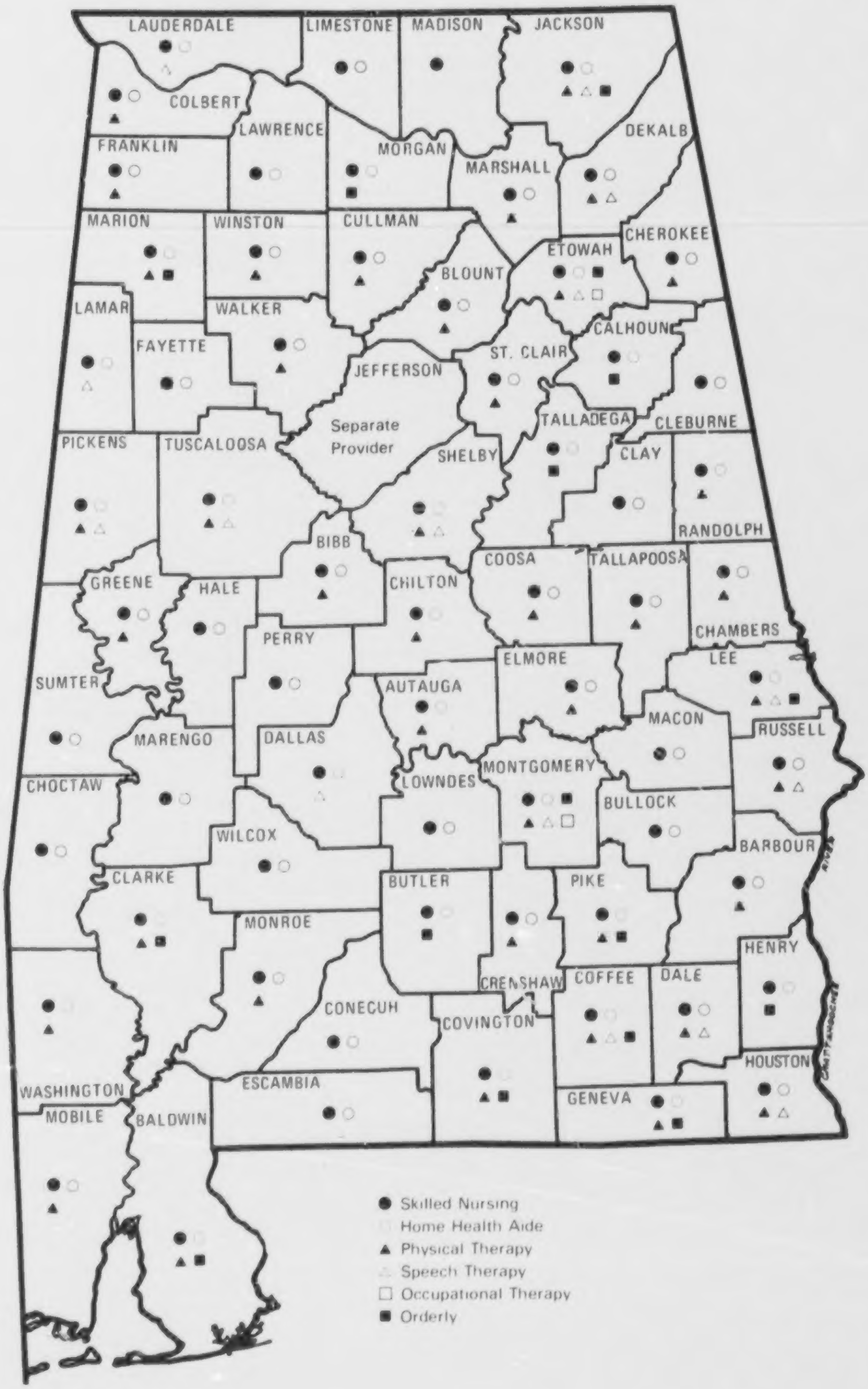
During fiscal year 1982 the Division of Home Health Services continued its efforts for more efficient operations at the division and the subunit levels. Efficiency will reduce the cost for each visit; therefore the home health coordinators met at the division office in groups of three or four for two days. Eighteen of these workshops were held from February through August. The thrust of these meetings was documentation and review of plans of care at the local level. The number of plans of care which have been returned to subunits for correction has already decreased, and an even greater decrease is anticipated.

The Memorandum of Understanding between the Office of Direct Reimbursement (ODR) of Health Care Financing Administration and the Division of Home Health Services was terminated September 30, 1982. Under this agreement ODR rendered no denials of service for fiscal yer 1982; therefore the division regrets that ODR no longer offers this program to providers. It seems to be a worthwhile program, and it is questionable whether reimbursements will continue to be timely.

The division continues to have 58 subunits with each providing skilled nursing care and home health aide services. Many subunits provide additional services. Using 32 contracts, 38 subunits provided physical therapy. Thirteen subunits contracted to make speech therapy available. Occupational therapy is available in two subunits. Sixteen counties added orderly services in 1982. Specialty services are primarily utilized in the Medicare program, but it is becoming more difficult to negotiate contracts for therapy services because of the time required for travel and for providing the in-home services. Chart 11-1 indicates the services provided in each county.

Norma Kappelman, Public Health Area IV nursing director, consults with nurses in the area to improve the quality of professional care and the documentation of services.

CHART 11-1
HOME HEALTH SERVICES AVAILABLE
HOME HEALTH AGENCY SUBUNITS
COUNTY HEALTH DEPARTMENTS
FISCAL YEAR 1982



In 1982 there was a 14.8 percent decrease in the total number of patients using home health services and a 36.1 percent decrease since 1980. The total number of patients has been decreasing since 1977. The patients participating in the various programs have fluctuated. Total visits increased very slightly (0.02 percent) in 1982, but there has been a 4.7 percent decrease since 1980. Graphs 11-1 and 11-2 give a three year comparison of the number of patients and visits.

This year 12 counties adopted programs of fee for services on a sliding scale, bringing the total to 20. Plans are presently underway for six counties to begin participating in 1983. Perhaps by the end of the coming year at least 10 other counties will elect to have a fee for service program operational. Emphasis will continue to be placed on this program, and long-range plans include participation by all counties which provide home health services. Medically indigent patients will continue to be served at no charge. Chart 11-2 shows the fee for service counties in 1982.

During the past few years grants have assisted counties in expanding and enhancing their home health programs. Baldwin County was awarded a grant to enrich and expand its program. This project began in May 1982, and in four months patients had increased more than 700 percent. Visits increased proportionately. Marshall and Jackson counties had a grant which expired at the end of October 1982. Both of these counties met their objectives of increasing the number of patients and visits.

No great programmatic changes occurred in either the Medicare or Medicaid programs during this year. Restrictions on coverage for services remained essentially the same as 1981.

The Omnibus Reconciliation Act of 1980 among other things brought into being regional fiscal intermediaries in the Medicare program. This portion of the law was implemented in early 1982. Blue Cross-Blue Shield of Alabama was designated as the intermediary for providers in Alabama. In early February the Division of Home Health Services was notified of the switch from dealing directly with the Office of Direct Reimbursement (ODR), Health Care Financing Administration to Blue Cross-Blue Shield of Alabama. Division personnel began working with Blue Cross so that a smooth transition would occur.

Martha Russell uses the computer to facilitate compiling information which Medicare requires for reimbursement for home health services.

At the time of the notification, a suit was pending against HCFA which contended that providers must be given a choice of intermediary and that the law provides for agencies to receive reimbursement directly from the Secretary of the Department of Health and Human Services. In March 1982 before the change occurred, the division was notified that the U.S. District Court had handed down a decision in the suit and that the change in intermediaries would not be required. In September the District of Columbia Circuit Court of Appeals ruled that section 1874 of the original Medicare Act empowered the Secretary to reimburse providers either directly or contractually. The court, in reversing the District Court ruling, held that the Secretary is free to use this power to require home health agencies to deal with intermediaries instead of ODR whenever he deems necessary. However HCFA must follow the rule making process prior to utilizing this authority.

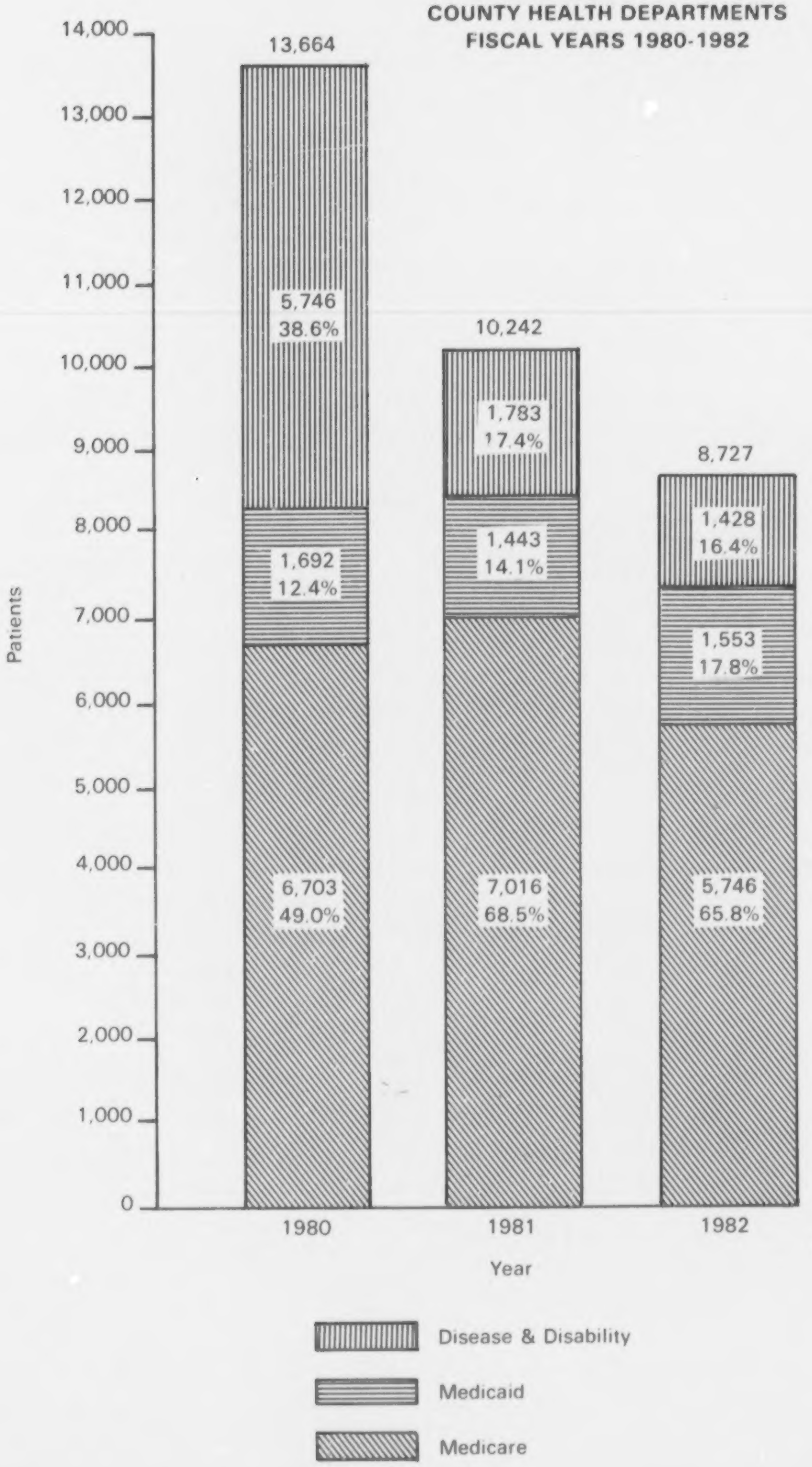
Therefore on October 12, 1982, the division was notified that no home health agency dealing with ODR would be required to transfer to a designated regional intermediary before the applicable final regulation is published. The ODR is the division's preferred intermediary because of the excellent consultation in all facets of the program—general administration, medical, nursing and fiscal. ODR personnel have adhered strictly to the regulations of the program and have been fair in rendering decisions affecting Alabama's program.

In keeping with the objective of increased efficiency, division staff have worked closely with personnel in the Bureau of Health Data Systems to devise compuer programs which will assist in evaluating the overall home health operation. The information in the home health section of the monthly Activity Report is now available by computer printout. This tool eliminates the biannual manual tabulation of Medicaid and Disease and Disability home health activities in the subunits. Using the printout should save approximately $1,130 a year.

One of the regulations that subunits must comply with to remain certified as Medicare/Medicaid providers is to perform an annual in-depth evaluation of all services for the previous year. The area public health nursing directors in cooperation with subunit personnel make this evaluation. Previously these statistics were tabulated manually also. Now all information about the Medicare program is provided on computer printout; so it takes about one-tenth the time to secure the necessary information. These tools should save the Health Department approximately 58 work days or $5,465.

Rendering quality care continues to be top priority in all the subunits. Being more efficient is the means of enhancing the quality of home health care.

GRAPH 11-1
PATIENTS
HOME HEALTH AGENCY SUBUNITS
COUNTY HEALTH DEPARTMENTS
FISCAL YEARS 1980-1982



GRAPH 11-2
VISITS
HOME HEALTH AGENCY SUBUNITS
COUNTY HEALTH DEPARTMENTS
FISCAL YEARS 1980-1982

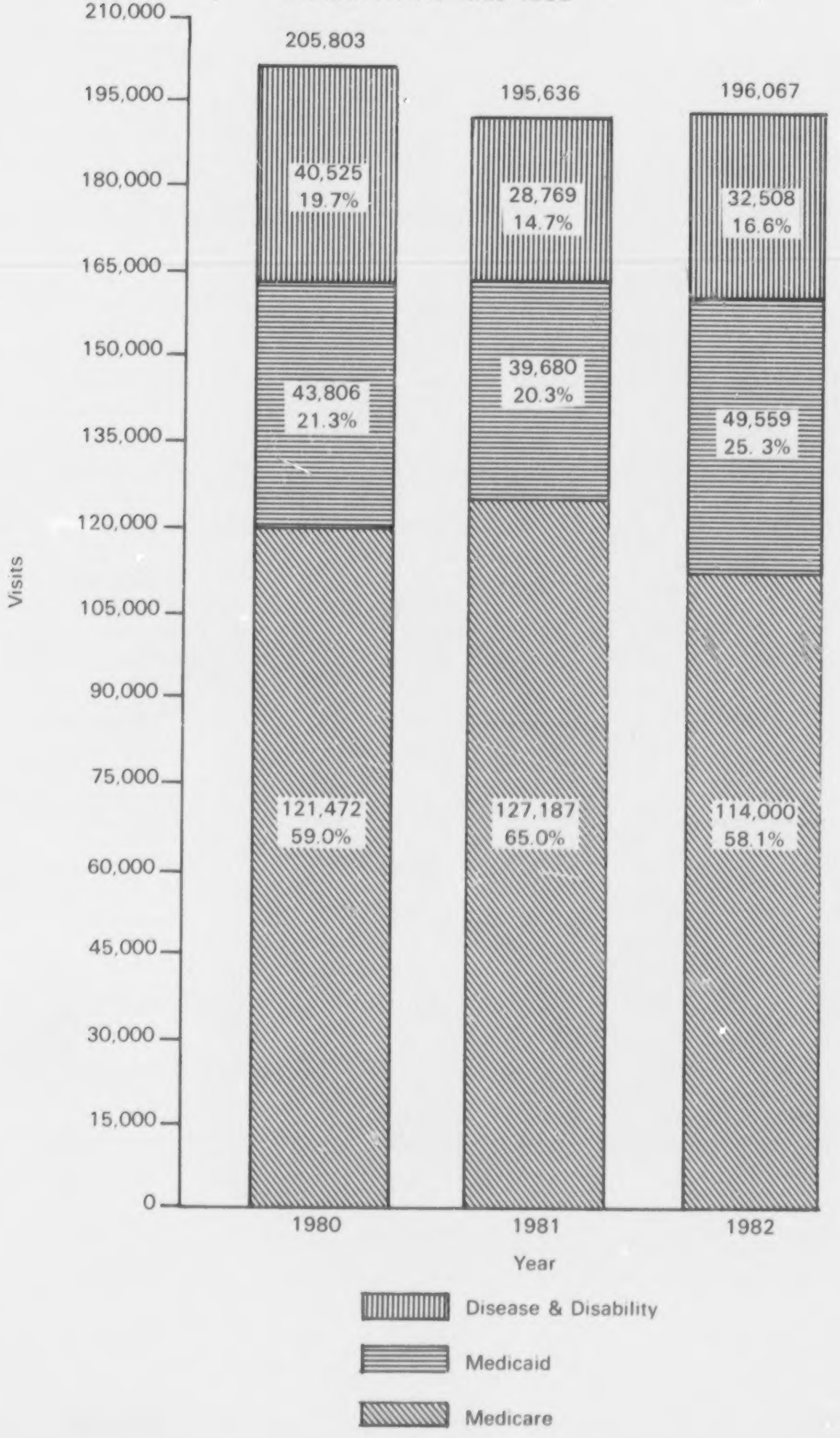
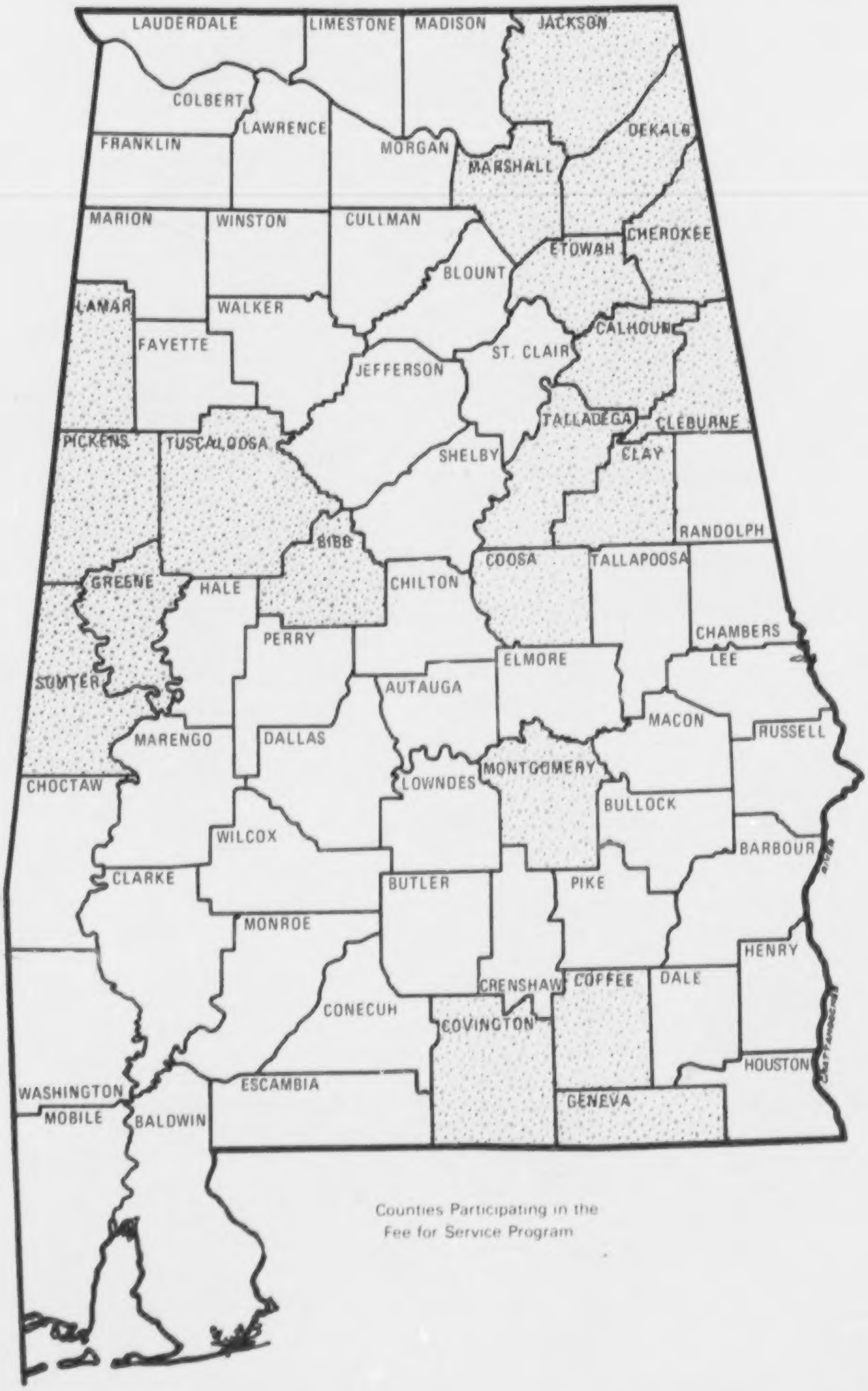


CHART 11-2
COUNTY HEALTH DEPARTMENT SUBUNITS
FEE FOR SERVICE PROGRAM
FISCAL YEAR 1982



Counties Participating in the
Fee for Service Program

Division of Planning, Training and Evaluation

The goal of the Division of Planning, Training and Evaluation continues to be to provide quality educational programs which will assist the nurses in this state in providing quality public health nursing services for the people of Alabama.

The division provided one-day staff development programs three times during the year in thirteen, rather than twelve, areas of the state. The first session was on "Nursing Management" using Thomas Merton's theory on the "Pygmalion Effect: The Self-fulfilling Prophecy," followed in the afternoon by a session on "Stress Management." A total of 228 public health nurses attended this session held during January and February 1982.

One of the most important activities of the public health nurse is in the area of health teaching. Every contact she makes should have a learning experience. To assist the nurse in improving skills in health teaching, two sessions were developed for 1982. The April-May staff development programs emphasized the "Public Health Nurse's Role in Health Teaching" and the "Principles of Learning." Personnel of the Clinical Laboratory Administration developed and conducted an informative presentation on abnormal hemoglobins. This session had 293 public health nurses in attendance.

The August-October staff development programs focused on the "Principles of Teaching" and "Teaching Methods Used by the Public Health Nurse." There were 287 public health nurses who participated in this staff development program.

Human service aide workshops were increased from six to nine presentations held twice during 1982. The first session was attended by a total of 154 aides and public health nursing coordinators. The first session was on "Care of the Patient with Arthritis." Faculty for this portion of the program was made available through Project HELP. Hospital equipment used in the home was explained and demonstrated for the aides.

The second session held in October and November presented two topics of interest and concern for the human service aides. The first was a session on "Intake and Output" which is a responsibility of the aide. The second session was on "Tuberculosis." Personnel from the Tuberculosis Control Division responded to a request for faculty. A total of 188 human service aides and public health nursing coordinators attended this workshop.

Two one-week state orientation programs for public health nurses were held with 27 new public health nurses attending. Basic principles of public health nursing were presented. Program directors participated by discussing their programs and the services they provide to the public.

A workshop was developed to provide public health nurses with information that will enable them to use effectively the problem-oriented system of recording by writing pertinent, concise progress notes. Seventeen sessions were held throughout the state with 227 nurses attending.

The public health nursing supervisors' workshop was held in Clanton with 64 public health nursing supervisors attending. Dr. Ira L. Myers keynoted the workshop. The topic was "No Nonsense Supervision" and included such topics as recruitment, orientation and training of new personnel; performance appraisals; ways to prevent personnel problems; methods of disciplining effectively; motivation; and working towards effective communication.

Workshops that the division cosponsored or coordinated with others in providing educational experiences for public health nurses included:

Child Health Maintenance Workshop, University of Kentucky and Family Health Administration, Alabama Department of Public Health.

Cancer Chemotherapy Program, University of Alabama Hospital.

Head Injury Conference, Spain Rehabilitation Center, University of Alabama Hospital

The division staff on behalf of public health nursing attended meetings of the Council Against Rape, the Alabama Gerontological Society and the Regional Genetic Task Force of the University of South Alabama as well as the American Nurses Association's annual convention. The director of this division served as chairman of the Regional Genetic Task Force which was instrumental in planning a genetic clinic in the Montgomery area.

Slide presentations, "The Nursing Bag Technique," were developed this year. Both slide presentations, "Home Health Services" and "The Generalized Public Health Nursing Program," were revised and updated.

The *Public Health Nursing Procedure Manual*, prepared by the Bureau of Public Health Nursing, was completed, printed and distributed the latter part of this year. Efforts are already under way to revise sections of this manual to keep it current and functional for use by public health nurses.

The division conducted workshops for secretaries on the "Pygmalion Effect" and "Stress Management" in Public Health Areas IV, V and VI.

A professor at the Troy State University School of Nursing is conducting a research study in cooperation with public health nurses in Macon, Houston and Montgomery counties to identify pregnant teenagers. The purpose of this investigation is threefold:

1. Identify and describe physical, psychosocial and cultural characteristics/attributes of the rural, pregnant adolescent in Southeast-Central Alabama.
2. Provide an accurate data base on rural, pregnant teenagers which will assist nurses in providing relevant nursing care to these individuals.
3. Utilize this data base for future investigations.

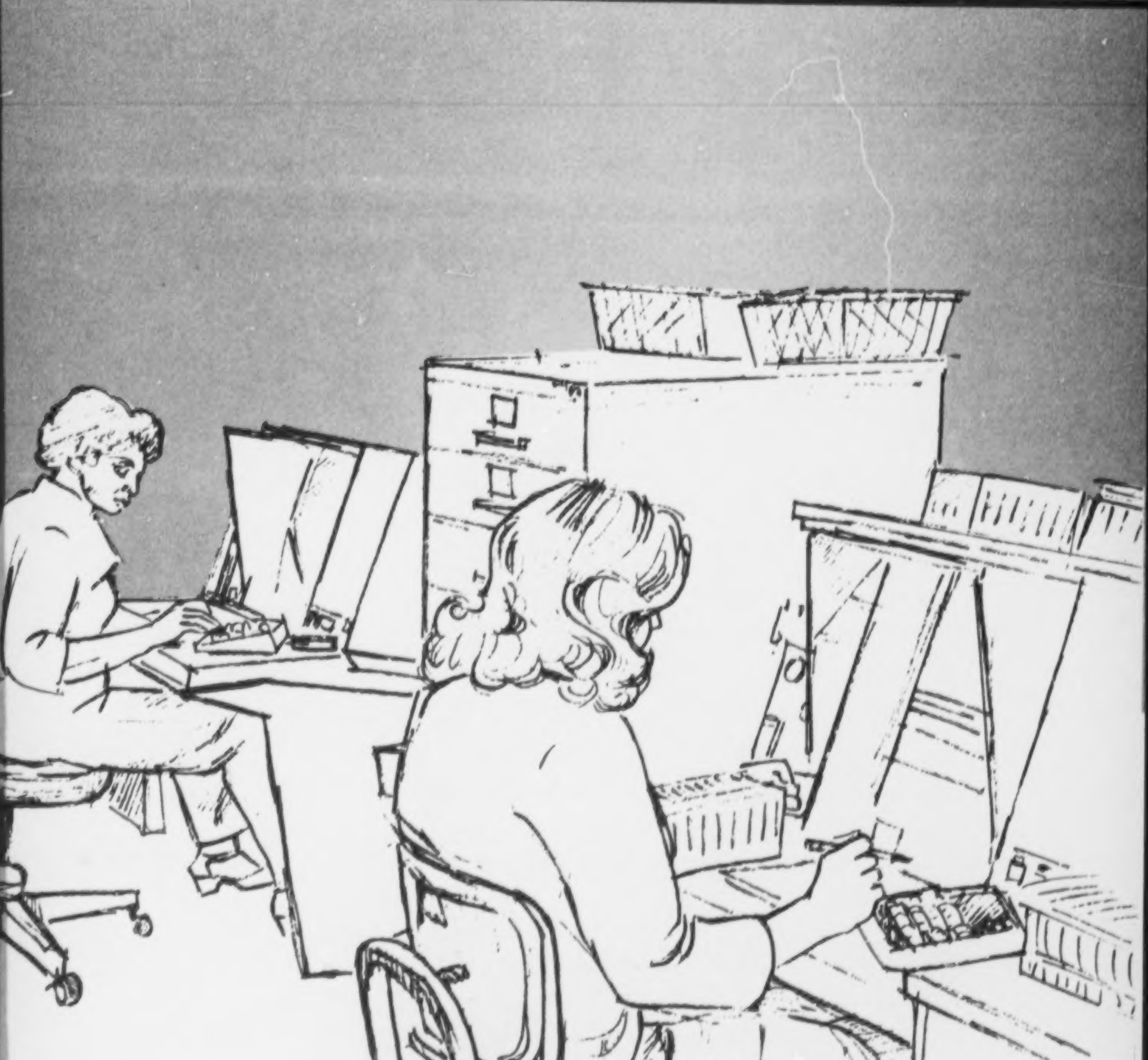
Most often it is the public health nurse who is the first professional made aware of a girl's situtation and who becomes a significant person to the girl and to the family during this period of crisis. It is imperative that nurses be able to identify and describe the various physical, psychosocial and cultural characteristics of the rural, pregnant teenager. This study should enable the public health nurse to make better assessments earlier and to initiate care more quickly.

Public health nurses in selected counties have been asked to participate in a research project designed by a graduate student from the School of Nursing, University of Alabama in Birmingham. The purpose of the study is to ascertain if there is a difference in compliance of the phenylketonuria (PKU) client subsequent to community health nursing intervention.

Nursing research continues to be an area that has a significant contribution to make to the practice of public health nursing. The division will continue to work with schools of nursing and others to promote research in the field of public health nursing.

This division will be working with area public health nursing directors to redefine the standards of practice of public health nurses and to ensure quality nursing care.

Special Services Administration



SPECIAL SERVICES ADMINISTRATION

The diverse programs in the Bureau of Health Data Systems, the Bureau of Primary Prevention and the Bureau of Vital Statistics are coordinated by this office. There are 11 divisions in these three bureaus. The director of the administration continued to serve as state registrar and director of the Bureau of Vital Statistics. Purposes of this administration are to coordinate and evaluate the multiple programs within each bureau. The administration establishes the operating policies and procedures and administers the effectiveness and efficiency of each unit.

In addition to management and supervision, the administration provides professional and technical assistance to the state and county health departments and serves as a catalyst to promoting preventive health programs to the people of Alabama.

BUREAU OF HEALTH DATA SYSTEMS

The Bureau of Health Data Systems is responsible for developing and maintaining computer systems and data for 22 user areas within the Health Department. It is comprised of four divisions—Administrative, Data Entry, Computer Operations, and Systems Design and Programming—and consists of 26 people.

The Data Entry Division consists of 11 data entry operators and one data entry supervisor and is responsible for keying and key verifying data. During this year the unit produced in excess of 30 million keystrokes monthly, utilizing 65 different keying formats. An IBM 5285 key-to-diskette data station was installed to replace the older method of keying with 80 column punched cards. This method will allow the division to be more progressive, utilizing more modern techniques.

The Computer Operations Division consists of three computer operators, two data control librarians and one supervisor. The unit is responsible for maintaining batch control on all user source documents and for computer processing to meet schedules. In order to meet schedules, it was necessary to operate 1½ shifts—7:00 a.m. until 9:00 p.m. A new IBM System 34 was installed and all operations personnel utilized IBM education to become qualified. Microfiche was utilized in some areas to replace large computer printouts. During 1982 this division processed an average of 3,000 jobs monthly, printed output in excess of six million lines monthly and maintained a library of 625 computer tapes. Several improvements were made in the production area with respect to process controls.

The Systems Design and Programming Division consists of five computer programmers and one supervisor. This unit is responsible for maintaining more than 700 computer programs and developing new systems and programs. During this year the division made changes to or developed 671 programs. Major development effort occurred in the areas of TB, Vital Statistics and WIC although programming was performed in 22 different areas within the department.

All computer programs, kept previously on punched cards, were installed at the State Data Center in order to utilize a more modern method of on-line programming using CRT's accessing the State Data Center.

As previously mentioned the IBM System 34 computer system was installed. This system will allow the older Mohawk RJE Station to be phased out and will also allow the department to utilize new state-of-the-art data processing methods. It will allow the bureau to be more responsive to the needs of the department, including current operations and systems development.

Along with the System 34 installing, a major educational process was undertaken consisting of 176 man-hours for programming and computer operations. The initial application and development was begun in the Bureau of Vital Statistics. This will allow Vital Statistics to key death certificates, to inquire about birth files at the State Data Center, and to eliminate the manual effort of reconciling certain reports. The initial system will allow Vital Statistics to access the system through 10 on-line CRT's. Other major development areas planned for the coming year include the department's Personnel Division and Finance Division.

BUREAU OF PRIMARY PREVENTION

Mass distribution of health information has made Alabamians as well as other Americans conscious of the importance of good health and aware of the factors which enhance or hinder it. The Bureau of Primary Prevention has continued to be the unit of the Health Department which disseminates information. In providing this service to the department and the public, the bureau utilizes a three-pronged approach—graphics, education and information. Thereby Primary Prevention strives to meet the challenge of being the first defense against disease, the purpose from which the bureau received its name in 1966.

To upgrade services, the bureau has renovated quarters for the library and has acquired some new equipment. With the renovation which was completed in August, new shelves and other equipment were installed.

Primary Prevention was selected for the location of the electronic mail system provided by the U.S. Food and Drug Administration. This equipment gives the department ready access to reports such as the Tylenol problem and to product recalls. The bureau sends copies of the materials to appropriate units of the Health Department.

The Bureau of Primary Prevention assisted the Finance Division in revising the *Instruction Manual* of the Cost Accounting System and in conducting training sessions. The bureau edited and typeset the manual, and then staff went to every county for a total of 85 sessions in which they explained the changes in procedures and format and reviewed continued practices. Answers to representative questions asked during the training sessions were compiled, and a copy was sent to each county.

Also the bureau assisted Finance by preparing a summary of department activities. This information was used to substantiate budgetary needs.

The staff served public health by active participation in health promotion groups. These included Governor's Advisory Council on Alcohol, Drug Abuse and Mental Illness; Project HELP Advisory Council; State Advisory Panel for Child Automobile Safety; Officer of the U.S. Consumer Product Safety Commission; Alabama Public Health Association; and Highway Safety Coordinating Committee.

Division of Graphic Communication

Making the work of others easier and more effective is the task of the Division of Graphic Communication. As a service support unit of the Health Department, this division coordinates all printing, typesets materials, prepares illustrations, pastes up camera ready copy and provides photographic services. However cuts in funding have reduced the requests for many of these services.

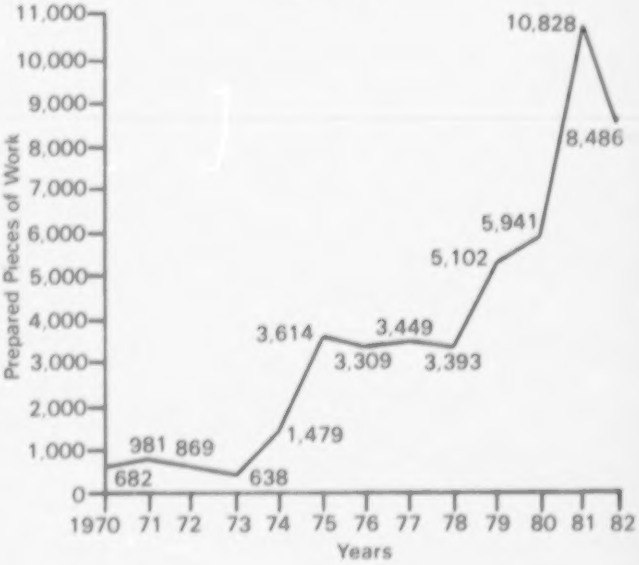
During fiscal year 1982, the director prepared work orders for 1,250 requests for printing. The resulting 19 million impressions produced materials costing $265,450. There were nearly 21 percent fewer impressions than the year before, and the expenditure for printing services was down by some 19 percent despite the increase in unit costs. Table 12-1 reports printing work for each month.

TABLE 12-1
DEPARTMENT PRINTING
FISCAL YEAR 1982

	Requests	Impressions	Cost
October	146	1,734,017	$24,929.98
November	98	1,503,810	21,041.88
December	84	2,123,775	26,526.11
January	116	1,635,355	25,479.82
February	57	1,364,834	14,902.32
March	140	1,465,582	22,186.27
April	104	1,122,790	18,355.00
May	105	1,506,183	20,291.09
June	87	1,308,425	17,875.95
July	99	1,404,974	20,178.23
August	112	2,562,205	34,431.48
September	102	1,019,281	19,251.62
TOTAL	1,250	18,751,231	$265,449.75

The 8,486 pieces of work produced by the artist/illustrators represent a 21.6 percent decrease. This reduction in number of items is somewhat misleading in that all pieces of artistic work do not require the same amount of time and effort to produce. Furthermore there was a reduction in staff with the cooperative education student not being replaced when her term ended. Graph 12-1 gives a comparison of work from 1970 to 1982.

GRAPH 12-1
ARTIST/ILLUSTRATORS
1970-1982



After copy has been removed from the typesetting processor, Typesetter Pat Hill checks it before submitting for paste up.

In 1982 the typesetters produced 2,446 items compared with 1,767 in 1981 and 1,869 in 1980. Despite the 38.4 percent increase in number of items last year, the typesetters were able to reduce the lag time for production. Better utilization of the equipment, resulting from training and experience with it, speeded up the process.

There was a marked difference in specific items typeset. The increase in total number resulted primarily from the seven fold increase in number of slides (210 compared to 1,465). There were sharp reductions in the number of certificates, charts, forms, graphs and letters. Table 12-2 permits a three year comparison of specific items. The 40 books prepared in 1982 contributed to the backlog which existed at the beginning of the year. By the end of the calendar year this backlog had been virtually eliminated.

TABLE 12-2
TYPESET MATERIALS
1980-1982

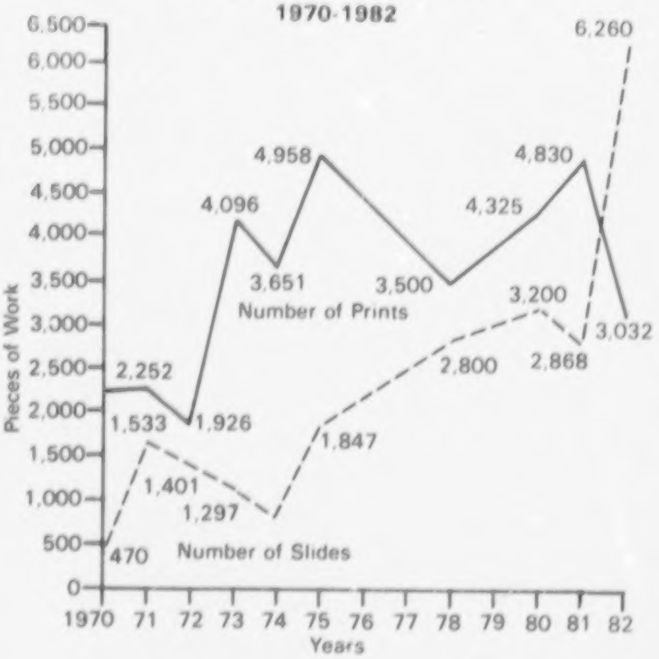
Kind of Materials	1980	1981	1982
Books	26	27	40
Book Covers	3	11	50
Brochures	93	44	51
Bumper Sticker		1	
Calendar	2	1	1
Calling Cards	73	96	57
Certificates	550	289	26
Charts		84	12
Cue Cards		4	8
Documents		4	44
Envelopes	6	11	8
Forms	517	326	172
Graphs	420	122	20
Invitations		4	
Labels	68	4	84
Letterheads	9	13	12
Letters typed on MT/ST		295	140
Maps		39	11
Name Placards		90	99
Newsletters		4	5
Organizational Chart		5	1
Pamphlets		9	
Posters	27	23	53
Programs	11	10	4
Route Slips		5	33
Seals		2	
Signs		7	
Slides	60	210	1,465
Tables		6	
Transparencies	4	21	48
Tag			1
Miscellaneous			1
TOTAL	1,869	1,767	2,446

The photographers served others in the department with 10,092 items—an increase of more than 17 percent. This increase is due to a 121.5 percent increase in the number of slides. The 6,260 slides were prepared to enhance training, especially for the Bureau of Vital Statistics, and speeches. The photographers experienced a 37.2 percent decrease in number of prints. Color prints were down from 310 in 1981 to 232 in 1982. There was an even greater difference in the number of black and white prints—4,520 in 1981 compared to 2,800 this year. In addition 800 PMTs were pulled. (The number for previous years was not available for comparison.)

In addition the photographers programmed and set up the slide presentation for Dr. Ira L. Myers' report to the Alabama Public Health Association and the Medical Association of the State of Alabama. This program was given to four other groups during the year.

Graph 12-2 illustrates the fluctuation in requests for photographic services.

GRAPH 12-2
PHOTOGRAPHIC SERVICES
1970-1982



Division of Health Education

For most of the year the Health Education/Risk Reduction Program continued to be a major activity of the Division of Health Education. In addition to its own activities, the division coordinated and evaluated the intervention programs which the Tuskegee Area Health Education Center and the Franklin Memorial Primary

Health Center conducted. The purpose of these programs was to effect a change in individual lifestyles whereby the risk of premature death and disability from chronic diseases would be reduced. Smoking, alcohol abuse, obesity, hypertension, stress and other preventable conditions as deterrents to good health were emphasized.

In conjunction with this program the *Directory of Community Health Education Programs in the State of Alabama* was revised in 1982. The agencies listed in the directory provide structured community health education programs.

Even though funding of the categorical grant for Health Education/Risk Reduction ended in August, the division's health education activities have continued as a part of the block grant funds. Health education is an integral component of preventing diseases.

Continuing an emphasis of the Health Education/Risk Reduction Program, the division cooperated with other health education activities throughout the state. Consequently health educators attended 51 workshops and helped plan or were on the program of 18 conferences or workshops.

The division also participated in the Teenage Risk Factor Prevalence Survey which the American Cancer Society conducted. Over 1,000 teenagers were contacted.

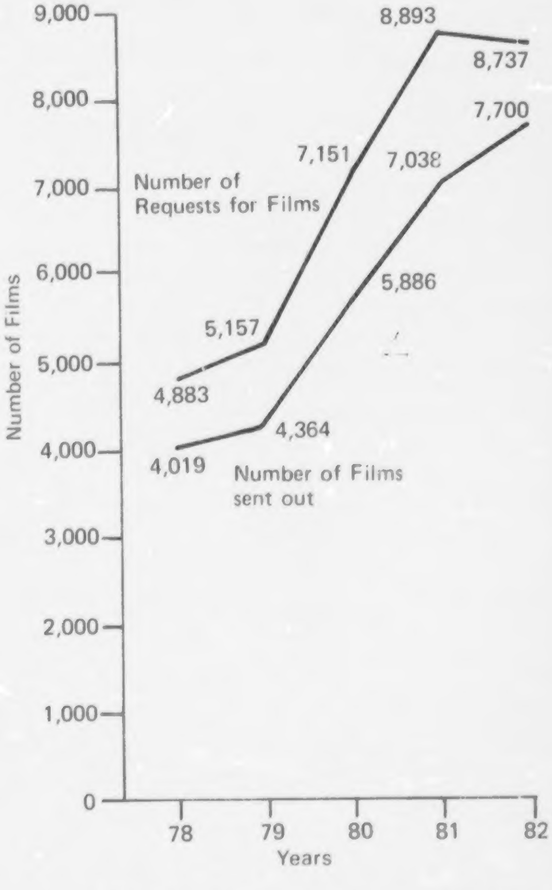
The division conducted the Alabama Behavior Risk Factor Prevalence Survey among adults. Of the more than 1,000 contacted, 696 responded to the questions. The data from this survey will serve as a basis for planning health education programs.

Information Specialist Bettye McManis demonstrates the proper use of an infant automobile safety restraint for Fairy Hurst.

The division also prepared the *Patient Education Guidelines for Prenatal, Well Child and Family Planning.* This publication was undertaken to assist the Bureau of Maternal and Child Health. To improve visibility of MCH clinics, the division produced four public service announcements, a brochure, a poster and an exhibit for the South Alabama State Fair. Three brochures on other topics were written, and four were revised.

The Health Education Resource Center continued to serve the public and the department. The film librarian responded to 8,737 requests and loaned 7,700 films. Graph 12-3 gives a five-year comparison of film usage. An estimated 300,000 to 400,000 persons viewed the films of the bureau in 1982. (Not all borrowers of films report the number of people attending each showing.) The audiovisual technician filled 506 requests for equipment.

GRAPH 12-3
FILM LIBRARY
1978-1982



The county health departments are engaged extensively in health education for their patients and in the communities. Tables 12-3 and 12-4 indicate the number of people served in the major activities.

TABLE 12-3
COMMUNITY HEALTH ACTIVITIES BY LOCAL HEALTH DEPARTMENTS
FISCAL YEAR 1982

	Classes	Visits	News Releases	Radio	TV	Exhibits	Films
PHA I							
Colbert	7	4	6	1	0	0	6
Cullman	2	0	0	0	0	0	0
Franklin	0	17	8	2	0	0	2
Jackson	1	184	0	0	0	0	0
Lauderdale	8	4	0	0	0	0	0
Lawrence	0	0	0	0	1	0	0
Limestone	5	6	0	0	1	0	1
Madison	39	74	2	0	12	2	748
Marion	1	17	27	9	0	0	0
Marshall	0	0	0	0	0	0	0
Morgan	67	4	0	1	1	1	30
Winston	3	17	15	0	0	217	3
TOTAL	133	327	58	13	15	220	790
PHA II							
Bibb	2	3	15	16	12	2	6
Fayette	2	0	0	0	0	0	0
Greene	4	9	22	27	24	18	9
Hale	9	1	73	0	0	0	0
Lamar	2	7	41	35	20	0	7
Pickens	6	8	36	28	23	4	11
Tuscaloosa	3,014	7,914	84	187	49	48	49
TOTAL	3,039	7,942	271	293	128	72	82
PHA III							
Blount	3	4	0	0	0	0	0
Chilton	6	3	0	0	0	0	0
Jefferson	1,345	23	19	36	33	7	399
St. Clair	1	7	4	0	0	0	2
Shelby	315	198	76	118	1	16	194
Walker	12	49	11	0	0	0	0
TOTAL	1,682	284	110	154	34	23	595
PHA IV							
Calhoun	1	82	0	7	0	0	0
Chambers	17	79	26	16	4	0	0
Cherokee	1	3	6	0	0	0	0
Clay	4	77	29	3	0	2	9
Cleburne	43	76	7	0	0	0	0
Coosa	8	23	8	0	0	0	0
DeKalb	168	86	42	0	0	1	150
Etowah	10	19	6	3	0	1	0
Randolph	8	15	51	3	0	0	0
Talladega	1	62	15	0	0	0	0
Tallapoosa	30	18	48	30	0	0	0
TOTAL	291	540	238	62	4	4	159

TABLE 12-3 (continued)
COMMUNITY HEALTH ACTIVITIES BY LOCAL HEALTH DEPARTMENTS
FISCAL YEAR 1982

	Classes	Visits	News Releases	Radio	TV	Exhibits	Films
PHA V							
Autauga	7	8	0	0	0	0	0
Barbour	31	25	18	0	0	0	1
Bullock	0	10	4	0	0	0	0
Butler	0	3	0	0	0	0	0
Coffee	10	12	21	12	1	124	0
Covington	48	15	34	3	0	4	7
Crenshaw	11	0	0	0	0	0	0
Dale	21	59	9	5	1	179	25
Elmore	72	2	6	0	0	0	0
Geneva	6	14	6	2	0	0	0
Henry	25	68	17	4	5	18	3
Houston	88	80	74	16	7	57	8
Lee	15	2	0	1	0	4	5
Lowndes	1	57	0	0	0	1	0
Macon	11	8	0	0	1	8	61
Montgomery	62	13	1	1	0	26	27
Pike	1	2	1	0	0	0	42
Russell	0	3	0	0	1	0	0
TOTAL	409	381	191	44	16	421	179
PHA VI							
Baldwin	1	71	6	0	5	57	2
Choctaw	3	46	15	0	0	270	2
Clarke	6	10	8	0	0	122	3
Conecuh	0	2	0	0	0	0	0
Dallas	7	3	0	0	0	1	0
Escambia	6	3	0	0	0	6	5
Marengo	3	19	0	0	0	0	1
Mobile	106	268	40	23	33	55	19
Monroe	11	348	1	7	1	0	0
Perry	45	0	74	0	0	0	0
Sumter	6	37	45	161	40	7	5
Washington	0	0	0	0	0	0	0
Wilcox	0	0	0	0	0	0	0
TOTAL	194	807	189	191	79	518	37
GRAND TOTAL	5,748	10,281	1,057	757	276	1,258	1,842

TABLE 12-4
PATIENT EDUCATION BY LOCAL HEALTH DEPARTMENTS
FISCAL YEAR 1982

	Adult Health Clinic	TB Chemotherapy	TB Chest Clinic	TB Outpatient Clinic	TB Skin Test Clinic	WIC Nutrition
PHA I						
Colbert	0	197	64	72	9	5,235
Cullman	1,184	526	45	4	1	1,972
Franklin	3	76	6	29	93	4,604
Jackson	13	120	27	20	267	3,669
Lauderdale	0	477	138	304	97	7,523
Lawrence	1,109	198	42	9	12	3,762
Limestone	1	252	86	23	8	3,332
Madison	9	2,699	1,228	241	2,823	2,341
Marion	0	271	135	39	462	2,121
Marshall	0	41	3	0	1,731	3,254
Morgan	329	923	120	18	16	5,126
Winston	5	344	45	129	39	3,141
TOTAL	2,653	6,124	1,939	888	5,558	46,080
PHA II						
Bibb	0	4	0	0	0	1,319
Fayette	0	234	2	7	64	1,758
Greene	1	42	38	4	6	5,550
Hale	1	175	25	38	195	6,463
Lamar	0	113	1	0	3	1,934
Pickens	0	241	18	75	65	1,581
Tuscaloosa	19	3,234	189	326	1,586	8,048
TOTAL	21	4,043	273	450	1,919	26,653
PHA III						
Blount	3	240	36	37	29	3,186
Chilton	2	10	0	46	2	3,594
Jefferson	15	12,034	0	336	1,817	29,360
St. Clair	0	213	6	46	21	4,725
Shelby	6	342	20	96	952	4,872
Walker	2	66	15	76	55	7,353
TOTAL	28	12,905	77	637	2,876	53,090
PHA IV						
Calhoun	0	1,411	84	101	421	3,643
Chambers	1,690	204	31	27	477	5,815
Cherokee	1	124	4	1	4	4,016
Clay	0	22	6	0	1	1,114
Cleburne	13	66	7	29	433	371
Coosa	0	19	2	7	1	1,565
DeKalb	2	619	160	0	395	6,715
Etowah	3	1,003	118	61	878	6,345
Randolph	2	19	1	0	1	1,793
Talladega	3	352	123	1	658	9,156
Tallapoosa	1	426	5	62	27	1,796
TOTAL	1,715	4,265	541	289	3,296	42,329

TABLE 12-4 (contunued)
PATIENT EDUCATION BY LOCAL HEALTH DEPARTMENTS
FISCAL YEAR 1982

	Adult Health Clinic	TB Chemotherapy	TB Chest Clinic	TB Outpatient Clinic	TB Skin Test Clinic	WIC Nutrition
PHA V						
Autauga	2	25	22	3	6	5,739
Barbour	4	56	8	23	41	4,744
Bullock	0	145	14	53	2	3,068
Butler	49	124	48	0	3	727
Coffee	1	178	25	31	588	16,031
Covington	0	126	0	36	25	2,204
Crenshaw	1	20	0	12	8	3,992
Dale	22	186	50	27	74	3,151
Elmore	0	11	0	9	5	5,293
Geneva	2	6	3	4	1	8,992
Henry	0	87	3	24	140	2,828
Houston	2	2,846	32	362	1,730	3,923
Lee	127	522	115	165	2,575	3,771
Lowndes	0	30	1	0	0	4,533
Macon	36	105	33	102	56	2,881
Montgomery	0	1,798	159	309	510	41,452
Pike	0	38	1	6	8	10,072
Russell	1	384	54	161	552	2,631
TOTAL	247	6,587	568	1,327	6,324	126,032
PHA VI						
Baldwin	7	71	53	1	234	16,683
Choctaw	4	52	8	0	20	2,149
Clarke	0	24	13	0	1	7,733
Conecuh	1	20	5	0	11	6,156
Dallas	0	615	36	96	4	17,347
Escambia	5	62	0	0	4	9,665
Marengo	0	326	23	31	21	9,140
Mobile	0	4,173	1,000	2,350	1,019	23,998
Monroe	0	56	0	0	0	1,183
Perry	0	54	45	0	33	8,022
Sumter	195	416	7	20	15	5,796
Washington	0	60	10	0	26	3,038
Wilcox	0	0	4	0	4	16,660
TOTAL	212	5,929	1,204	2,498	1,392	127,570
GRAND TOTAL	4,876	39,853	4,602	6,089	21,365	421,754

Division of Health Information

Dissemination of health information is paramount in achieving the purpose of the Bureau of Primary Prevention. The news media are essential to this program. During 1982 the bureau mailed 10,745 news releases and public service announcements. The subjects of these ran the gamut—recall of products, threats of disease, warnings of unsafe practices and products, recognition of professionals, promotion of health and safety. Some 30 different subjects were covered in news releases.

Media interviews as well as radio and television talk shows were used to communicate the health message. In 1982 electronic media representatives provided Primary Prevention staff with 72 occasions for reaching the public.

The division planned and conducted 53 workshops on expectant mother safety and 11 Baby Week Safety clinics. An estimated 1,300 people attended these. Some 2,400 persons attended the 66 programs at which Primary Prevention staff were speakers.

The 175 health articles written by division staff had the potential for reaching hundreds of thousands of readers because the journals in which they were published have extensive circulation.

The librarian did research for and responded to 813 requests for information. An additional 577,827 health documents were distributed. Several new or revised brochures were produced during the year.

The bureau continued to set up displays in the State Office Building. A display on child safety was placed in the Capitol Rotunda, and another one was taken to the Governor's Traffic Safety Conference. The division set up displays and distributed health literature at six health fairs.

Editing *Alabama's Health*, Vital Statistics annual report, the department's annual report and regulations continued to be services which the division provided.

The Office of Highway and Traffic Safety has continued to fund the program to promote the use of child restraints in automobiles. This program necessitated writing four reports. Also as a part of this activity spring and fall surveys were conducted in four metropolitan areas to determine the use of child restraints in automobiles. The number of children in restraints increased partly because the 1982 Legislature passed a law requiring that children under three be placed in approved restraints. The Alabama Chapter of the American Academy of Pediatrics campaigned actively for passage of the bill. This group has supported and worked closely with the Primary Prevention program.

BUREAU OF VITAL STATISTICS

Throughout this reporting year the bureau operated with less personnel than it had ten years ago. Critical areas remained unmanned for six or eight months; therefore the employees should be commended for assisting in clearing certain backlogs before the year ended. Fewer fees were received and less money was expended than in the previous year although the number of certified copies issued increased.

A new handbook was produced for funeral directors, and the vital statistics law manual was updated and printed late in 1982.

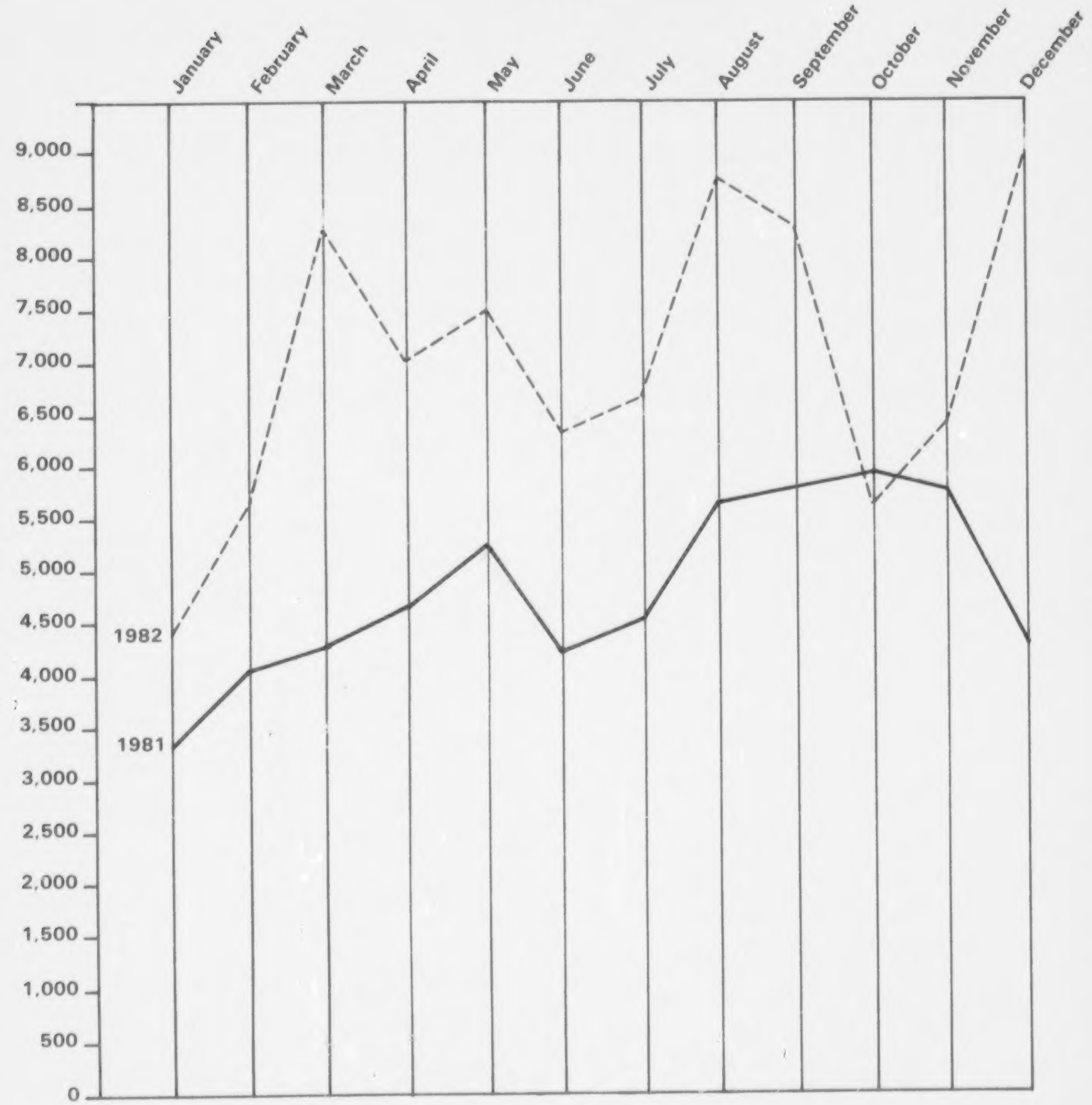
For two years a detailed study was made concerning computerizing the operations throughout the four divisions. After careful analysis the decision was made to purchase 11 CRT terminals, a CPU, a high-speed printer and a desk-top printer. These pieces of equipment were delivered at the end of the year and will be installed and in use in early 1983. Training of staff and menus were started during the month of December. It is expected that when the system is fully functioning the traditional operation of this bureau will not resemble the detailed manual procedures currently in use.

Division of Microfilm Services

As a result of recent modernization, the Division of Microfilm Services was able to reproduce a record number of certified birth certificates from microfilm. As Graph 12-4

Sandra Boyer is computerizing information received from hospitals, nursing homes and funeral homes so that it can be matched with certificate information.

GRAPH 12-4
COPIES REPRODUCED FROM MICROFILM
1981-1982



shows there was an increase over 1981 in almost every month. During 1982, 84,446 certified copies—about 40 percent of all certified copies issued—were reproduced from microfilm. The reproduction of copies from microfilm has enabled the division to reduce the turnaround time for customer requests. A very positive side effect has been the reduction in the use of the original records which enhances the quality of the certificates that are permanently stored.

The 59,265 birth certificates for 1978 and 61,891 certificates for 1979 were placed on microfilm, thereby increasing the availability of certificates on microfilm to 72 years from 1908 through 1979. In addition all 1982 marriages, divorces, deaths and fetal deaths were microfilmed with a duplicate microfilm copy stored in an off premise storage in case of a major disaster.

As in the past the Division of Microfilm Services performed microfilming for other state agencies on a time available basis. During 1982 additional state agencies utilizing these services were the State Personnel Department and the State Finance Department. Also during the year there were 2,020,500 WIC vouchers microfilmed for the Health Finance Division.

During the year a new printer was requisitioned to upgrade the printing of the bindings for storage of the certificates. This new method of printing will enable the division to color code the births, deaths, marriages and divorces for easy identification, reducing the possibility of misfiling the volumes.

The Division of Microfilm Services will continue to strive for more expeditious service to the general public and perform needed microfilm services for other state agencies.

Division of Registration Services

Throughout 1982 the Division of Registration Services received and filed more than 169,000 records of birth, death, fetal death, marriage and divorce, a slight decrease from more than 170,000 records the previous year. Each individual record group showed a decrease as well from the registration of the previous year with a significant decrease noted for fetal deaths and divorces (13 percent fewer fetal deaths and almost 8 percent fewer divorces).

The division worked on 7,686 delayed birth certificate files with a total of 3,297 delayed birth certificates actually being filed. The decrease from the previous year (10 percent) which was noticed in this area is expected to continue since requirements for filing delayed births will become more strict in 1983. This action will serve to improve the overall quality of delayed birth registration in Alabama.

In 1982 the division received and processed 31,600 requests for copies of current birth certificates. Most of these requests were submitted to the bureau from Alabama hospitals in compliance with the statute passed by the 1979 Legislature. Fees totaled $153,369 with a slight decrease noted from the 1981 total.

The division received and processed more than 9,200 requests for certified copies of current death certificates, an increase of at least 13 percent over any of the four previous years. In spite of this sizeable increase, more timely processing of these requests was achieved in this area. With the installation of computer terminals in the registration office, increased efficiency will be expected in this area for the coming year.

Field Services—The vital statistics field program continued to stress completeness and timeliness in the filing of vital records with special emphasis being placed on reports from hospitals, funeral homes and nursing homes. A program was begun whereby the local registrar is notified on a monthly basis of any reports that have not been received. Also the field representative made personal visits to several major hospitals to solicit their cooperation in reporting and filing birth, death and fetal death certificates.

Each month a delinquent certificate report that included the name of the physician responsible for the medical certification was submitted to the State Committee of Public Health. In 1982 one probate judge was referred to the department's legal staff for failure to file marriage certificates.

The vital statistics seminars for local registrars, coroners and medical records personnel were held throughout the state. They were increased from two one-day meetings to seven one-day meetings to accommodate the largest number of people ever to attend.

During 1982 a new publication entitled *Handbook for Funeral Directors* was published and distributed.

The field representative traveled in excess of 15,000 miles and made more than 160 visits to hospitals, physicians, funeral homes, coroners and local registrars.

At the close of the year, a new computer system had been installed in the Vital Statistics Bureau with a terminal available to the field program. This computer system will allow the field program to track every death and birth certificate by county, hospital, funeral home and physician on a daily basis.

Division of Record Services

The primary responsibility of the Division of Record Services is to provide the general public with certified copies of vital records and special records services, to provide administrators and governmental agencies with noncertified copies for use in research projects, and to preserve all existing records and legal documents that are in the sealed confidential files.

Some of the services of the division are preparing new birth certificates after legitimation or adoption, amending vital records, issuing certified copies and issuing certificates of failure to find record if the record is not recorded.

New birth certificates for 2,576 persons who were born in Alabama and adopted were 1,125 fewer than last year. Certificates of birth were prepared for 692 persons who were born out of Alabama, and there were 57 fewer of these certificates than in 1981.

The 1,997 birth certificates that were prepared for legitimated individuals were 62 more than last year.

Even though the division was without an amendment clerk for most of the year, 8,613 amendments were accepted on birth certificates for a decrease of 1,823. Amendments to death certificates totaled 113 for an increase of 19 over 1981, and 25 amendments to marriage records were filed which made a decrease of 11.

The 46,882 certified copies issued at the service counter and the 171,002 that were issued from mail requests made a total of 217,884 for 1982.

The number of noncertified copies that were issued to copy-issuing centers and to child-placing agencies for

Rosetta Howard is setting up incoming mail in which requests for copies of vital records are received.

adoptions decreased by 466 for a total of 3,069. Paid noncertified copies of death records to governmental agencies for health research increased by 628 for a total of 1,878.

The births, deaths and marriages verified by division personnel for the Alabama Department of Pensions and Security on its PSD-56 form numbered 409. These are searched and verified free of charge.

The division received 172,925 pieces of mail in 1982 for a decrease of 6,511.

Fees received totaled $1,049,212.08, a decrease of $3,083.08.

Table 12-5 recaps activities of the division.

TABLE 12-5
RECAP OF RECORD SERVICE ACTIVITIES
1981-1982

	1982	1981
Legitimations	1,997	1,935
Court Legitimations Pending	250	300
Adoptions		
Alabama Born	2,576	3,701
Out-of-state Born	692	749
TOTAL	3,268	4,450
Amendments		
Births	8,613	10,436
Deaths	113	94
Marriages	25	36
TOTAL	8,751	10,566
Certified Copies		
Issued by Mail	171,002	169,212
Issued at Service Counter	46,882	46,747
TOTAL	217,884	215,959
Noncertified Copies		
To Copy-issuing Centers (Free)	2,607	2,980
To Child-placing Agencies (Free)	462	555
Deaths (Paid)	1,878	1,250
TOTAL	4,947	3,535
Pieces of Mail Received	172,925	179,436
Fees Received	$1,049,212.08	$1,052,295.16
No Records		
Births	14,015	
Deaths	855	
Marriages	140	
Divorces	154	
TOTAL	15,164	
Verified for Alabama Pensions and Security (Free Welfare)		
Located	293	
No Record	116	
TOTAL	409	
Certified Copies Issued		
Births	158,390	
Deaths	57,409	
Marriages	1,777	
Divorces	282	
Stillbirths	26	

Division personnel are looking forward to the additional computer services to be available in 1983. In addition to searching for all births, the computer will have availability to all current records plus the requests received by mail. This will eliminate having to contact the registration office upon receipt of a telephone inquiry concerning a particular record. Also available will be word processing equipment which will improve services.

Division of Statistical Services

The Statistical Services Division of the Bureau of Vital Statistics seeks to provide current data by answering requests and distributing publications and printed materials to data users.

A contract with the Cooperative Health Statistics System of the Department of Health and Human Services enables the Bureau of Vital Statistics to seek voluntary cooperation among data users at all levels of government in developing a current and accurate health data base. The bureau also furnishes the National Center for Health Statistics with data tapes of all deaths to Alabama residents for use in the National Death Index.

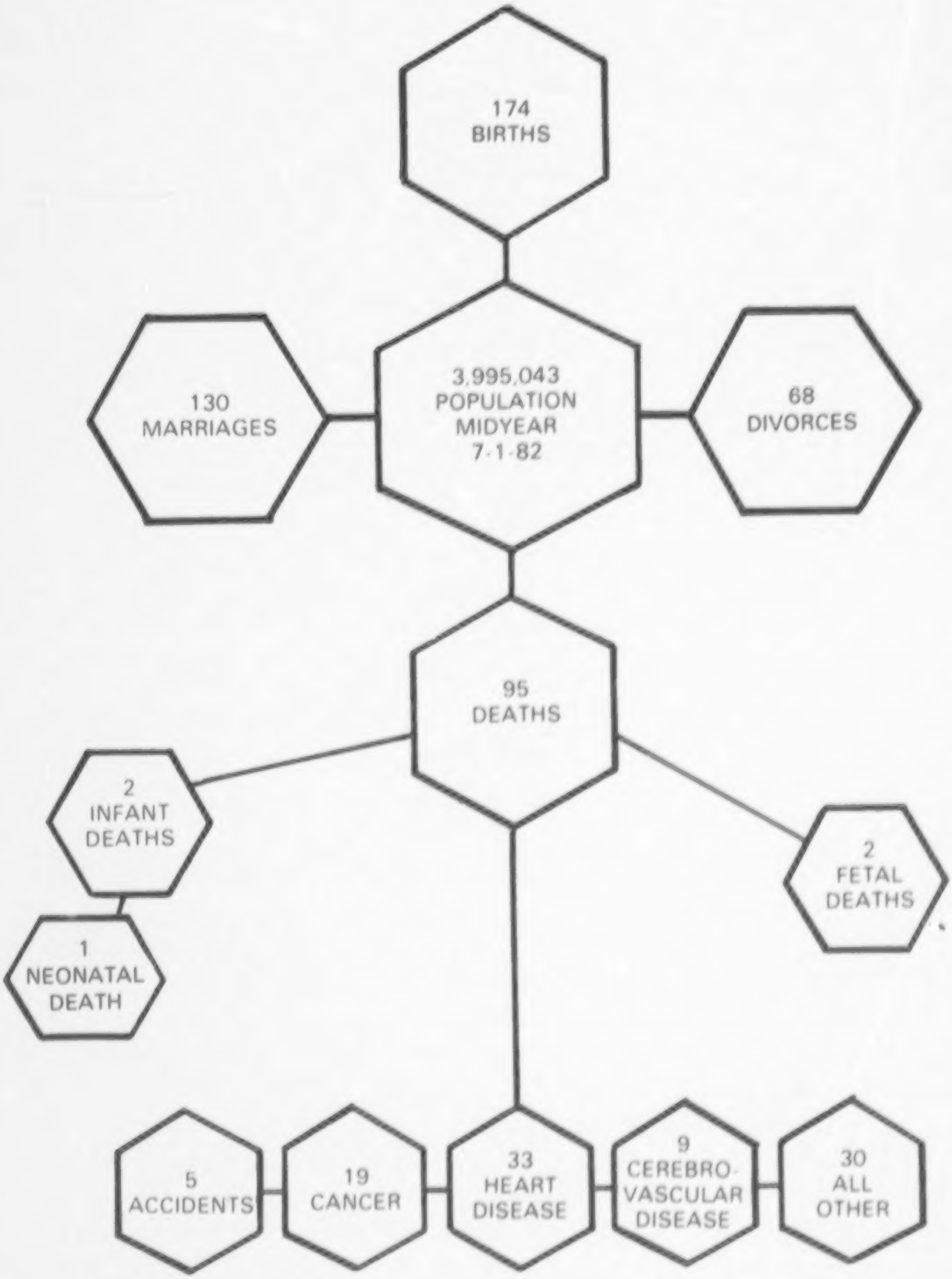
Continued publication of vital event data, natality, mortality and teenage birth statistics, resident births by place of occurrence and data from the linkage of infant deaths and birth records was accomplished in 1982. In addition all computer listings for the years 1944-1959 were microfilmed for easy accessibility. This eliminated the handling of heavy books. The division is also receiving current data on comfiche from data processing. The Division of Statistical Services answered over 800 telephone requests for vital event data.

The Division of Statistical Services is responsible for the coding of all certificates, the preparation of all statistical data for distribution to data users and the analysis of these data. All the following data are provisional, based on an estimated count of vital events for 1982.

Chart 12-1 gives the daily average of certain vital events.

Shirley Bibb and Jackie Hand search for records of birth certificates in response to requests for certified copies. They utilize computer terminals, indexes and volumes of records.

CHART 12-1
EVERY DAY DURING 1982 ALABAMA AVERAGED APPROXIMATELY



Provisional Data

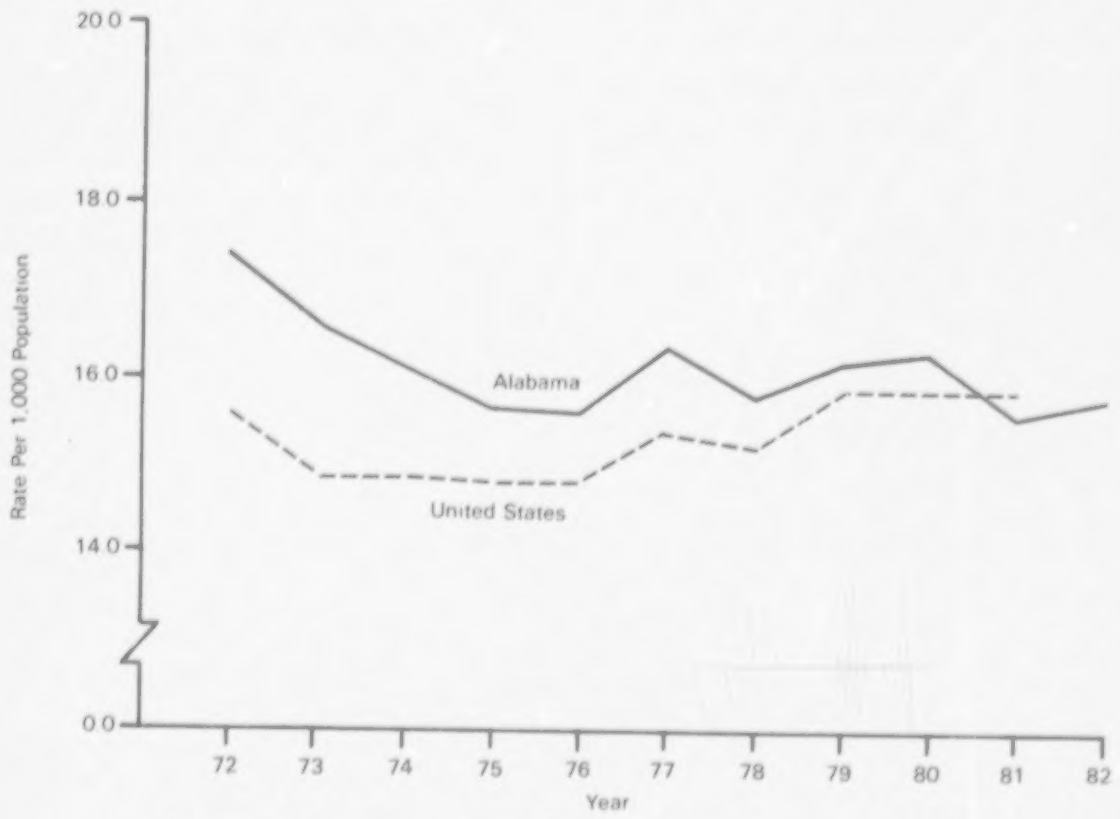
Births—The estimated crude birth rate increased slightly during 1982. The crude birth rate was 15.8 per 1,000 population.

The estimated 63,505 births occurring to Alabama residents in 1982 are the highest number of births since 1971. This number is 2,008 more than the previous year. Birth rates for Alabama and the United States are compared in Graph 12-5.

Deaths—The general mortality rate decreased during the year. Preliminary data indicate that the 34,799 deaths to Alabama residents during 1982 resulted in an 8.7 provisional crude mortality rate. The 549 fewer deaths resulted in a corresponding decrease in the mortality rate of approximately 3 percent. Graph 12-6 compares mortality rates for Alabama and the United States from 1972 to 1982.

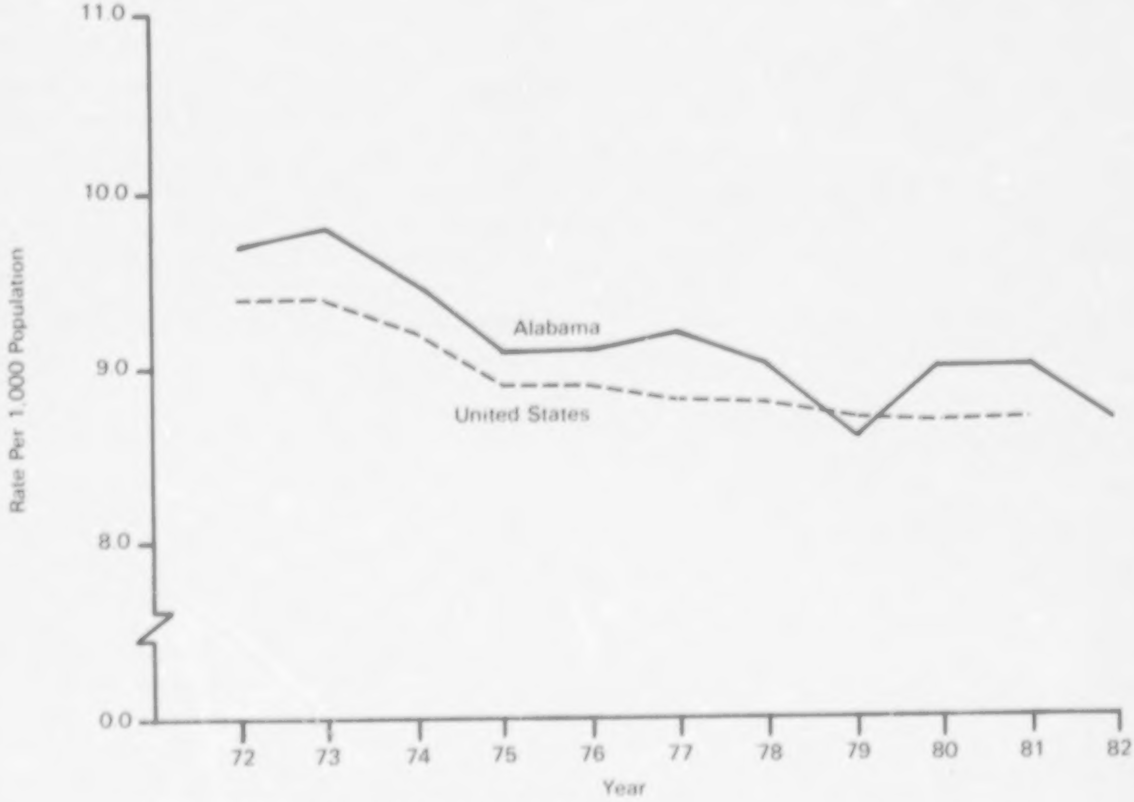
Heart disease continued to be the leading cause of death

GRAPH 12-5
BIRTH RATES
ALABAMA AND UNITED STATES
1972-1982



NOTE: U.S. Rate 1981, Alabama Rate 1982: Provisional Data
U.S. Rate 1982 Not Available

GRAPH 12-6
MORTALITY RATES
ALABAMA AND UNITED STATES
1972-1982



NOTE: U.S. Rate 1980, 1981, and Alabama Rate 1982 Provisional
U.S. Rate 1982 Not Available

to Alabama residents. A decrease in the number and rate of heart disease mortality occurred during 1982. Heart disease has been the leading cause of death for over 50 years.

Malignant neoplasms continued to be the second leading cause of death to Alabama residents. A decrease of 296 in number resulted in an estimated mortality rate of 172.9 per 100,000 population for malignant neoplasms.

Cerebrovascular diseases, the third leading cause of death in 1982, caused the death of an estimated 3,189 Alabamians, or about 9 percent of all deaths. The estimated 79.8 cerebrovascular disease mortality rate is below the 1981 rate.

The estimated accidental deaths in Alabama indicate a decrease in number and mortality rate. The provisional accidental mortality rate of 49.0 is about 10 percent lower than the 54.7 rate for 1981.

Table 12-6 lists the leading causes of death with the number and rate for each.

TABLE 12-6
LEADING CAUSES OF DEATH
1981 and 1982

1982				1981		
Rank	Number	Rate	Cause of Death	Rank	Number	Rate
—	34,799	8.7	Total All Causes	—	35,348	9.0
1	11,894	297.7	Diseases of the Heart	1	12,010	304.4
2	6,908	172.9	Malignant Neoplasms	2	7,204	182.6
3	3,189	79.8	Cerebrovascular Diseases	3	3,462	87.7
4	1,959	49.0	Accidents	4	2,160	54.7
5	1,060	26.5	Chronic Obstructive Pulmonary Diseases & Allied Causes	5	1,022	25.8
6	647	16.2	Diabetes Mellitus	8	632	16.0
7	643	15.1	Diseases of the Arteries	6	743	18.8
8	620	15.5	Pneumonia & Influenza	7	734	18.6
9	490	12.3	Homicide	9	554	14.0
10	429	10.7	Suicide	—	398	10.1
—	343	8.6	Chronic Liver Diseases and Cirrhosis	10	403	10.2
—	6,617	—	All Other Causes	—	6,026	—

*Provisional

Early and adequate prenatal health care aids in reducing fetal, infant and maternal deaths.

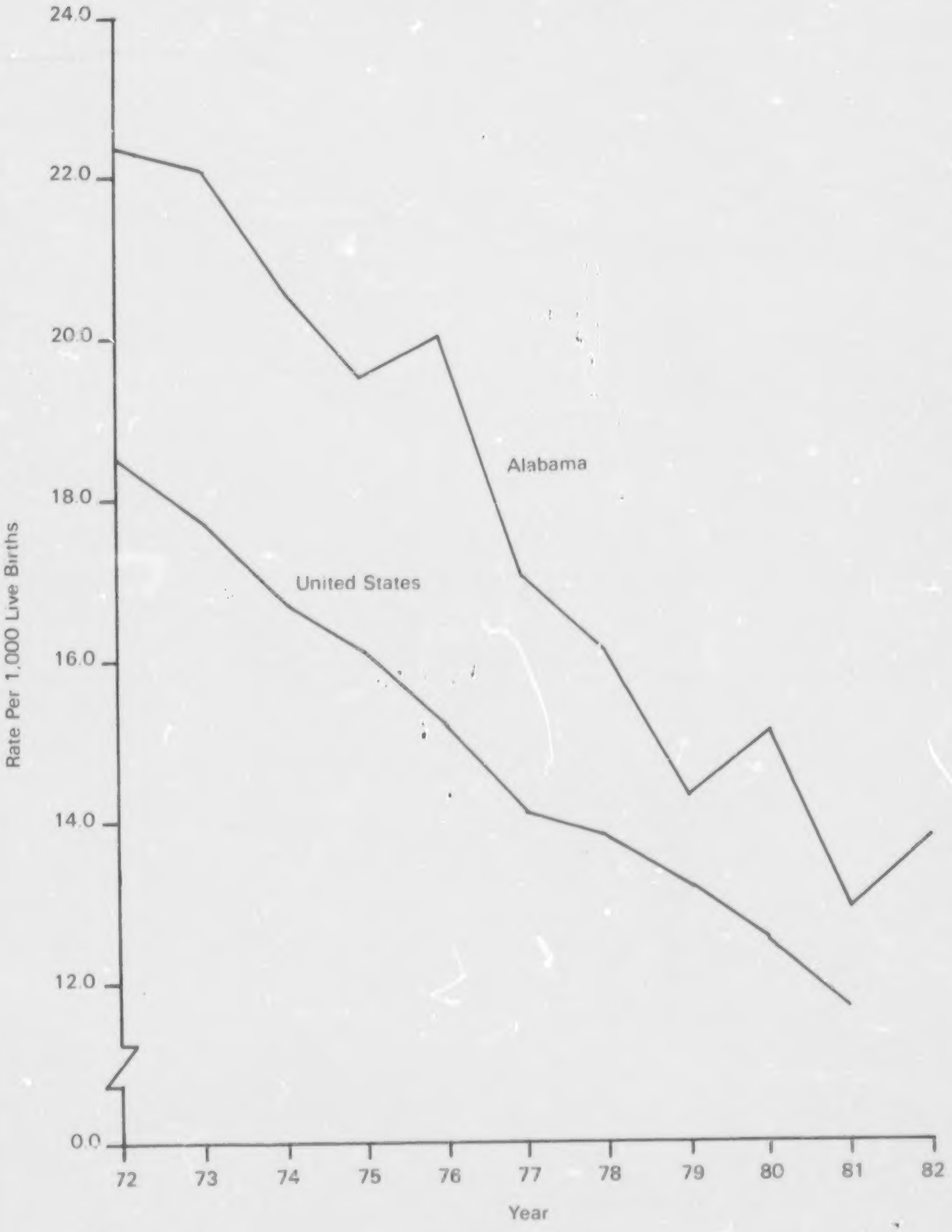
Infant and Fetal Mortality—Graph 12-7 shows the dramatic decrease in infant mortality since 1972 in Alabama as well as the United States. Indications are that the final number of infant deaths and the infant death mortality rate for 1982 will be an increase from the 1981 figures. The estimated 882 infant deaths for 1982 resulted in a 13.8 infant mortality rate. An increase in the neonatal mortality also occurred as the estimated neonatal deaths increased from 556 to 604.

Preliminary data indicate that the number of fetal deaths decreased in 1982 to 675, a numerical decrease of approximately 10 percent. The provisional fetal mortality rate of 10.6 was about 13 percent lower than the 12.3 rate of 1981.

Maternal Mortality—An estimated 12 mothers died from complications of childbirth, labor and puerperium during the year. This number is almost twice as many as 1981 and resulted in a 1.8 rate per 10,000 live births.

Marriages and Divorces—The number of marriages during 1982 was 1,279 fewer than the previous year. This number resulted in a provisional marriage rate of 11.9 per 1,000 population, a slight decrease from the rate of 12.3 for 1981.

GRAPH 12-7
INFANT MORTALITY RATE
ALABAMA AND UNITED STATES
1972-1982



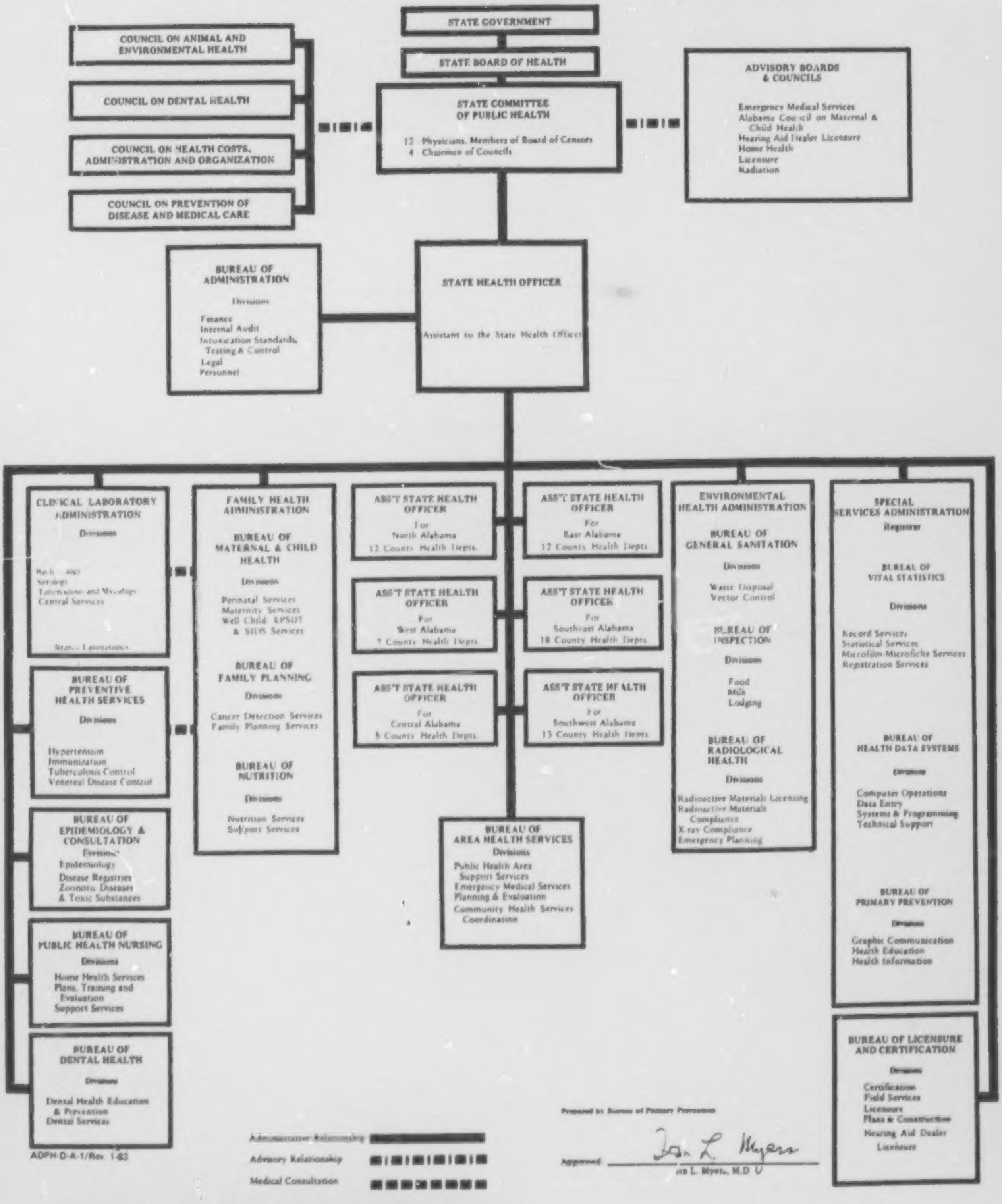
NOTE: U.S. Rate 1980, 1981, Alabama Rate 1982 Provisional
U.S. Rate 1982 Unavailable

In 1982 divorces decreased for the first time since 1977. The 24,910 divorces in Alabama represent a numerical decrease of 1,881. The estimated divorce rate was 6.2 per 1,000 population.

Population—Alabama's estimated midyear 1982 population was 3,995,043, based on 1980 census data. About 73 percent of the population was white. There were more females than males in Alabama. The sex ratio remained almost the same as in 1981—about 108 females per 100 males.

Professional health care in health department clinics gives an infant a start to a long, productive life and reduces the adverse effects of disease.

ORGANIZATION OF THE ALABAMA DEPARTMENT OF PUBLIC HEALTH



STATE GOVERNMENT

STATE BOARD OF HEALTH

STATE COMMITTEE OF PUBLIC HEALTH
12 Physicians, Members of Board of Censors
4 Chairmen of Councils

COUNCIL ON ANIMAL AND ENVIRONMENTAL HEALTH

COUNCIL ON DENTAL HEALTH

COUNCIL ON HEALTH COSTS, ADMINISTRATION AND ORGANIZATION

COUNCIL ON PREVENTION OF DISEASE AND MEDICAL CARE

ADVISORY BOARDS & COUNCILS
Emergency Medical Services
Alabama Council on Maternal & Child Health
Hearing Aid Dealer Licensure
Home Health
Licensure
Radiation

STATE HEALTH OFFICER
Assistant to the State Health Officer

BUREAU OF ADMINISTRATION
Divisions
Finance
Internal Audit
Intoxication Standards, Testing & Control
Legal
Personnel

CLINICAL LABORATORY ADMINISTRATION
Divisions
Bacteriology
Serology
Tuberculosis and Mycology
Central Services
Branch Laboratories

BUREAU OF PREVENTIVE HEALTH SERVICES
Divisions
Hypertension
Immunization
Tuberculosis Control
Venereal Disease Control

BUREAU OF EPIDEMIOLOGY & CONSULTATION
Divisions
Epidemiology
Disease Registries
Zoonotic Diseases & Toxic Substances

BUREAU OF PUBLIC HEALTH NURSING
Divisions
Home Health Services
Plans, Training and Evaluation
Support Services

BUREAU OF DENTAL HEALTH
Divisions
Dental Health Education & Prevention
Dental Services

FAMILY HEALTH ADMINISTRATION

BUREAU OF MATERNAL & CHILD HEALTH
Divisions
Perinatal Services
Maternity Services
Well Child EPSDT & SIDS Services

BUREAU OF FAMILY PLANNING
Divisions
Cancer Detection Services
Family Planning Services

BUREAU OF NUTRITION
Divisions
Nutrition Services
Support Services

ASS'T STATE HEALTH OFFICER
For
North Alabama
12 County Health Depts.

ASS'T STATE HEALTH OFFICER
For
East Alabama
12 County Health Depts

ASS'T STATE HEALTH OFFICER
For
West Alabama
7 County Health Depts

ASS'T STATE HEALTH OFFICER
For
Southeast Alabama
18 County Health Depts

ASS'T STATE HEALTH OFFICER
For
Central Alabama
5 County Health Depts

ASS'T STATE HEALTH OFFICER
For
Southwest Alabama
13 County Health Depts

BUREAU OF AREA HEALTH SERVICES
Divisions
Public Health Area Support Services
Emergency Medical Services
Planning & Evaluation
Community Health Services Coordination

ENVIRONMENTAL HEALTH ADMINISTRATION

BUREAU OF GENERAL SANITATION
Divisions
Waste Disposal
Vector Control

BUREAU OF INSPECTION
Divisions
Food
Milk
Lodging

BUREAU OF RADIOLOGICAL HEALTH
Divisions
Radioactive Materials Licensing
Radioactive Materials Compliance
X-ray Compliance
Emergency Planning

SPECIAL SERVICES ADMINISTRATION
Registrar

BUREAU OF VITAL STATISTICS
Divisions
Record Services
Statistical Services
Microfilm-Microfiche Services
Registration Services

BUREAU OF HEALTH DATA SYSTEMS
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Computer Operations
Data Entry
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BUREAU OF PRIMARY PREVENTION
Divisions
Graphic Communication
Health Education
Health Information

BUREAU OF LICENSURE AND CERTIFICATION
Divisions
Certification
Field Services
Licensure
Plans & Construction
Hearing Aid Dealer Licensure

Administrative Relationship ▬▬▬
Advisory Relationship ▬ | ▬ | ▬ | ▬
Medical Consultation ■ ■ ■ ■ ■ ■ ■

ADPH-D-A-1/Rev. 1-82

Prepared by Bureau of Primary Prevention

Approved: Ira L. Myers
Ira L. Myers, M.D.

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